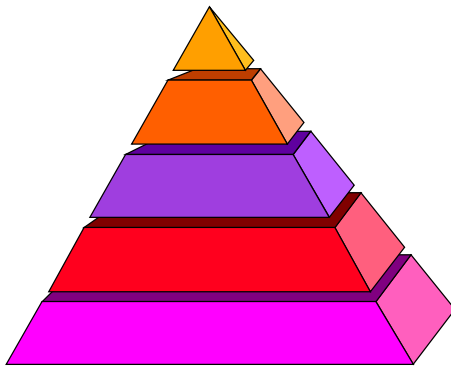# TIU/ASU

Implementation Guide
(Revised)

August 1999
Revised January 2002

Department of Veterans Affairs
*V*IST*A* System Design & Development
Computerized Patient Record System Product Line

Text Integration Utilities V. 1.0
Implementation Guide

Table of Contents

Revision History

Date	Page	Change
6/24/99	129	Updated Released Patches appendix
8/12/99	129	Updated Released Patches appendix
8/12/99		Added description of using Document Templates through CPRS
4/16/01	Appendix B & C	Explanation of Class Membership expiration. Interdisciplinary Notes Setup.
October 2001	Parameter Setup Examples	Patch 128—Upload Parameters
January 2002	Parameter Setup Examples	Patch 129—Upload Op Reports to Surgery: Improve Reliability

TIU/ASU IMPLEMENTATION OVERVIEW

This is a revised version of the Text Integration Utilities (TIU) Implementation Guide, updated to include changes resulting from patches, as well as helpful hints from those who have assisted in setting TIU and ASU up.

What's in this Manual?

Instructions and examples for setting up:

- Document Parameters
- Document Definitions
- Boilerplate text and Objects
- Upload capabilities
- User Classes
- Business Rules
- Links to the Computerized Patient Record System (CPRS)

☞ Start planning before you install TIU!

Keep it simple
Not everything described in this manual has to be done before you can begin using the package. The exported file entries for Document Definitions, User Classes, and Business Rules may be sufficient to get you started while you gain experience on how to refine the basic Document hierarchy and User Class structures.

Intranet WWW Documentation

Documentation for this product is available on the Intranet (World Wide Web) at the following address:

www.vista.med.va.gov /tiu

TIU PARAMETERS

Introduction

Options on the TIU IRM Maintenance Menu let IRMS Staff set and modify the various parameters controlling the behavior of the Text Integration Utilities Package, as well as the definition of TIU documents. TIU is exported with default settings for many of the parameters, which may be sufficient for your site to get started. Review the parameter settings to see if they meet your site's needs.

This menu also contains sub-menus and options for managing the Document Definition hierarchy and for managing User Classes and Business Rules.

These options are described in the following sections.

TIU Maintenance Menu {TIU IRM MAINTENANCE MENU}

```
1  TIU Parameters Menu...[TIU SET-UP MENU]
   1  Basic TIU Parameters [TIU BASIC PARAMETER EDIT]
   2  Modify Upload Parameters [TIU UPLOAD PARAMETER EDIT]
   3  Document Parameter Edit [TIU DOCUMENT PARAMETER EDIT]
   4  Progress Notes Batch Print Locations [TIU PRINT PN LOC PARAMS]
   5  Division - Progress Notes Print Params [TIU PRINT PN DIV PARAMS]

2  Document Definitions (Manager)...[TIUF DOCUMENT DEFINITION MGR]
   1  Edit Document Definitions [TIUFH EDIT DDEFS MGR]
   2  Sort Document Definitions [TIUFA SORT DDEFS MGR]
   3  Create Document Definitions [TIUFC CREATE DDEFS MGR]
   4  Create Objects [TIUFJ CREATE OBJECTS MGR]

3  User Class Management ...[USR CLASS MANAGEMENT MENU]
   1  User Class Definition [USR CLASS DEFINITION]
   2  List Membership by User [USR LIST MEMBERSHIP BY USER]
   3  List Membership by Class [USR LIST MEMBERSHIP BY CLASS]
   5  Manage Business Rules [USR MANAGE BUSINESS RULES]

4   Re-Index Document File for CPRS [TIU RE-INDEX DOCUMENT FILE]
```

TIU Parameters Menu [TIU SET-UP MENU]

This menu contains options for setting up the basic parameters and upload parameters.

Option	Option Name	Description
Basic TIU Parameters	TIU BASIC PARAMETER EDIT	This option allows you to enter the basic or general parameters, which govern the behavior of the Text Integration Utilities.
Modify Upload Parameters	TIU UPLOAD PARAMETER EDIT	This option allows the definition and modification of parameters for the batch upload of documents into V*IST*A.
Document Parameter Edit	TIU DOCUMENT PARAMETER EDIT	This option lets you enter the parameters, which apply, to specific documents (i.e., Titles), or groups of documents (i.e., Classes, or Document Classes).
Division - Progress Notes Print Parameters	TIU PRINT PN DIV PARAM	These parameters are used by the [TIU PRINT PN BATCH INTERACTIVE] and [TIU PRINT PN BATCH SCHEDULED] options. If the site desires a footer other than what is returned by $$SITE^ VASITE the .02 field of the 1st entry in this file will be used. For example, Waco-Temple-Marlin can have the institution of their progress notes as "CENTRAL TEXAS HCF."
Progress Notes Batch Print Locations	TIU PRINT PN LOC PARAMS	Option for entering hospital locations used for [TIU PRINT PN OUTPT LOC] and [TIU PRINT PN WARD] options. If locations are not entered in this file they will not be selectable from these options.

Examples of these options are shown in the following pages.

Parameter Setup Examples

Options: Basic TIU Parameters, Modify Upload Parameters, and Document Parameter Edit

These three options are demonstrated here with examples of Discharge Summary implementation and Progress Notes implementation. An example for other types of clinical documents follows.

Discharge Summary Parameter Set-Up

1. If Discharge Summary version 1.0 is already implemented at your site, use VA FileMan to Print a "Captioned" listing of the existing GMRD SITE PARAMETERS (#128.99) and GMR REPORT TYPE (#128.1) file entries as follows:

```
> D P^DII
VA FileMan 21.0
Select OPTION: PRINT FILE ENTRIES


OUTPUT FROM WHAT FILE: 128.99  GMRD SITE PARAMETERS    (2 entries)
SORT BY: NUMBER// <Enter>
START WITH NUMBER: FIRST// <Enter>
FIRST PRINT FIELD: [CAPTIONED
Include COMPUTED fields:  (N/Y/R/B): NO// <Enter> - No record number (IEN), no
Computed Fields
  ***********************
Heading (S/C): GMRD SITE PARAMETERS LIST  Replace <Enter>
DEVICE: <device name>  ANYWHERE    RIGHT MARGIN: 80// <Enter>

GMRD SITE PARAMETERS LIST                         JAN 22,1997  13:53    PAGE 1
-----------------------------------------------------------------------------
DIVISION: SALT LAKE DOM                 ENABLE ELECTRONIC SIGNATURE: YES
  CHARACTERS PER LINE: 60               GRACE PERIOD FOR PURGE: 365
  GRACE PERIOD FOR SIGNATURE: 5         CHART COPY PRINTER: LTA35
  ASCII UPLOAD SOURCE: remote computer RECORD HEADER SIGNAL: $HDR
  BEGIN REPORT TEXT SIGNAL: $TXT        UPLOAD HEADER FORMAT: captioned
  UPLOAD PROTOCOL: KERMIT               STAT CHART COPY PRINTER: LASERJET 4SI
  REQUIRE AUTHOR TO SIGN: YES
  STAT SUMMARIES PRINTED: released and verified
  ROUTINE SUMMARIES PRINTED: released and verified
  ENABLE CHART COPY PROMPT: YES         ENABLE IRT INTERFACE: YES
  REQUIRE MAS REVIEW: YES               REQUIRE TRANSCRIPTION RELEASE: YES
  AMENDMENT SIGNATURE BLOCK: JAKE DOE, Privacy Act Officer
  BLANK CHARACTER STRING: ---           ENABLE NOTIFICATIONS DATE: NOV 21, 1994
ALERT RECIPIENT: FAN,TANA
ALERT RECIPIENT: SCHLAMENA,PAMELA
ALERT RECIPIENT: BERT,AL
ALERT RECIPIENT: MERRILL,CAROL P
```

Discharge Summary Implementation cont'd

```
   DIVISION: SALT LAKE CITY              ENABLE ELECTRONIC SIGNATURE: YES
   CHARACTERS PER LINE: 60               GRACE PERIOD FOR PURGE: 365
   GRACE PERIOD FOR SIGNATURE: 5         CHART COPY PRINTER: LTA35
   ASCII UPLOAD SOURCE: remote computer  RECORD HEADER SIGNAL: $HDR
   BEGIN REPORT TEXT SIGNAL: $TXT        UPLOAD HEADER FORMAT: captioned

 UPLOAD PROTOCOL: KERMIT                 STAT CHART COPY PRINTER: LTA35
   REQUIRE AUTHOR TO SIGN: YES
   STAT SUMMARIES PRINTED: released and verified
   ROUTINE SUMMARIES PRINTED: released and verified
   ENABLE CHART COPY PROMPT: YES         ENABLE IRT INTERFACE: YES
   REQUIRE MAS REVIEW: YES               REQUIRE TRANSCRIPTION RELEASE: YES
   AMENDMENT SIGNATURE BLOCK: HAROLD JOE, Privacy Act Officer
   BLANK CHARACTER STRING: ---           ENABLE NOTIFICATIONS DATE: NOV 26, 1994
ALERT RECIPIENT: DEFA,TANA
ALERT RECIPIENT: SCHLEHUBER,PAMELA
```

Print site parameters for GMR REPORT TYPE File (#128.1)

```
Select OPTION: PRINT FILE ENTRIES

OUTPUT FROM WHAT FILE: GMRD SITE PARAMETERS// 128.1  GMR REPORT TYPE
                                      (2 entries)
SORT BY: NAME// <Enter>
START WITH NAME: FIRST// <Enter>
FIRST PRINT FIELD: [CAPTIONED

Include COMPUTED fields:  (N/Y/R/B): NO// <Enter> - No record number (IEN), no
Computed Fields

  *************************
Heading (S/C): GMR REPORT TYPE LIST  Replace <Enter>
DEVICE: <device name> ANYWHERE    RIGHT MARGIN: 80// <Enter>

GMR REPORT TYPE LIST                            JAN 22,1997  13:54    PAGE 1
------------------------------------------------------------------------
NAME: DISCHARGE SUMMARY                ABBREVIATION: DCS
  LAYGO ALLOWED?: YES                  TARGET FILE: GMR REPORTS
  TARGET TEXT FIELD SUBSCRIPT: 2;TEXT  LOOK-UP LINETAG: LOOKUP
  LOOK-UP ROUTINE: GMRDFLRU
 DEFAULT REPORT FORMAT:
 DIAGNOSIS:
  OPERATIONS/PROCEDURES:
CAPTION: SOCIAL SECURITY NUMBER        ITEM NAME: SSN
  FIELD NUMBER: .02                    LOOKUP LOCAL VARIABLE NAME: GMRDSSN
  EXAMPLE ENTRY: 555-12-1234           CLINICIAN MUST DICTATE: YES
  TRANSFORM CODE: S:X?3N1P2N1P4N.E X=$E(X,1,3)_$E(X,5,6)_$E(X,8,12)
CAPTION: DATE OF ADMISSION             ITEM NAME: ADMISSION DATE
  FIELD NUMBER: .07                    LOOKUP LOCAL VARIABLE NAME: GMRDADT
  EXAMPLE ENTRY: 03/30/93              CLINICIAN MUST DICTATE: YES
CAPTION: DICTATED BY                   ITEM NAME: DICTATING PROVIDER
  FIELD NUMBER: 1.01                   EXAMPLE ENTRY: DOOGEY P. HOWSER, M.D.
  CLINICIAN MUST DICTATE: YES          TRANSFORM CODE: S X=$$INAME^GMRDLIBS(X)
CAPTION: DICTATION DATE                ITEM NAME: DICTATION DATE
  FIELD NUMBER: 1.03                   EXAMPLE ENTRY: 04/03/93
```

Discharge Summary Implementation cont'd

```
   CLINICIAN MUST DICTATE: YES
CAPTION: ATTENDING PHYSICIAN              ITEM NAME: ATTENDING PHYSICIAN
  FIELD NUMBER: 1.09                      EXAMPLE ENTRY: MARCUS C. WELBY, M.D.
  CLINICIAN MUST DICTATE: YES             TRANSFORM CODE: S X=$$INAME^GMRDLIBS(X)
CAPTION: TRANSCRIPTIONIST                 ITEM NAME: TRANSCRIPTIONIST ID
  FIELD NUMBER: 1.05                      EXAMPLE ENTRY: T1212
  CLINICIAN MUST DICTATE: NO
CAPTION: URGENCY                          ITEM NAME: STAT OR ROUTINE
  FIELD NUMBER: .09                       EXAMPLE ENTRY: PRIORITY
  CLINICIAN MUST DICTATE: YES


NAME: OPERATIVE REPORT                    ABBREVIATION: OPR
  LAYGO ALLOWED?: NO                      TARGET FILE: SURGERY
  TARGET TEXT FIELD SUBSCRIPT: 1.15;12
CAPTION: PATIENT ID                       ITEM NAME: PATIENT ID
  FIELD NUMBER: <Enter>                   EXAMPLE ENTRY: D4567
  CLINICIAN MUST DICTATE: YES
CAPTION: CASE NUMBER                      ITEM NAME: CASE NUMBER
  FIELD NUMBER: .001                      EXAMPLE ENTRY: 3546
  CLINICIAN MUST DICTATE: YES
CAPTION: SURGERY DATE/TIME                ITEM NAME: SURGERY DATE/TIME
  FIELD NUMBER: <Enter>                   EXAMPLE ENTRY: 4/1/94@09:45
  CLINICIAN MUST DICTATE: YES
```

☞ **NOTE:** In all cases, the examples given are for a site with multiple inpatient divisions. If you are implementing TIU at a site where this is NOT the case, only enter the parameters for a single institution.

2. Use the TIU BASIC PARAMETER EDIT option to initialize the electronic signature, notifications, chart copy prompting, grace periods, and blank character string parameters in a manner consistent with your current implementation of Discharge Summary:

```
Select TIU Parameters Menu Option: 1  Basic TIU Parameters
First edit Division-wide parameters:

Select INSTITUTION: 660
     1   660   SALT LAKE CITY      UT                                   660
     2   660AA  SALT LAKE DOM      UT                      VAMC       660AA
CHOOSE 1-2: 1   SALT LAKE CITY
  Are you adding 'SALT LAKE CITY' as a new TIU PARAMETERS (the 1ST)? Y  (Yes)
ENABLE ELECTRONIC SIGNATURE: Y  YES
ENABLE NOTIFICATIONS DATE: 11/26/97  (NOV 26, 1997)
GRACE PERIOD FOR SIGNATURE: 5
GRACE PERIOD FOR PURGE:<Enter>
CHARACTERS PER LINE: 60
OPTIMIZE LIST BUILDING FOR: performance//
SUPPRESS REVIEW NOTES PROMPT: YES//
ENABLE CHART COPY PROMPT: Y  YES          HINT: Use a character string that isn't likely to
BLANK CHARACTER STRING: @@@               occur in any of your boilerplate templates.
Press RETURN to continue...<Enter>        "@@@" is recommended.
```

BASIC PARAMETER EDIT cont'd
Adding another Institution

```
Select TIU Parameters Menu Option:  Basic TIU Parameters
First edit Division-wide parameters:
Select INSTITUTION: 660AA  SALT LAKE DOM    UT          VAMC      660AA
  Are you adding 'SALT LAKE DOM' as a new TIU PARAMETERS (the 2ND)? Y  (Yes)
ENABLE ELECTRONIC SIGNATURE: Y  YES
ENABLE NOTIFICATIONS DATE: 11/21/97  (NOV 21, 1997)
GRACE PERIOD FOR SIGNATURE: 5
GRACE PERIOD FOR PURGE: <Enter>
CHARACTERS PER LINE: 60
OPTIMIZE LIST BUILDING FOR: performance// <Enter>
SUPPRESS REVIEW NOTES PROMPT: YES//<Enter>
ENABLE CHART COPY PROMPT: Y  YES
BLANK CHARACTER STRING: @@@
Press RETURN to continue...<Enter>
```

Discharge Summary Upload Parameters

3.   Use the TIU UPLOAD PARAMETER EDIT option to initialize both the institution-wide and document-specific upload parameters in a manner consistent with your current implementation of Discharge Summary. (The document-specific upload parameters can also be defined through Document Definition options.)

☞   **Note:**   Some sites have defined additional captions for administrative use in resolving discrepancies. If you define additional captions *do not include field numbers for them*. Doing so can cause data to be overwritten with incorrect transcription data. For example, PATIENT may be overwritten with an incorrect patient.

```
Select TIU Parameters Menu Option: 2  Modify Upload Parameters
First edit Institution-wide upload parameters:
Select INSTITUTION: 660
     1   660  SALT LAKE CITY     UT                                660
     2   660AA  SALT LAKE DOM     UT                     VAMC      660AA
CHOOSE 1-2: 1  SALT LAKE CITY
        ...OK? Yes// <Enter>  (Yes)

ASCII UPLOAD SOURCE: r  remote computer
UPLOAD PROTOCOL: k  KERMIT
UPLOAD HEADER FORMAT: c  captioned
RECORD HEADER SIGNAL: $HDR
BEGIN REPORT TEXT SIGNAL: $TXT
RUN UPLOAD FILER IN FOREGROUND: NO//   NO

Now Select upload error alert recipients:

Select ALERT RECIPIENT: FAN,TAN
  Are you adding 'FAN,TAN' as
    a new UPLOAD ERROR ALERT RECIPIENT (the 1ST for this TIU PARAMETERS)? Y
  (Yes)
```

Modify Upload Parameters cont'd

```
Select ALERT RECIPIENT: SCHLAMENA,PAMELA
  Are you adding 'SCHLAMENA,PAMELA' as
    a new UPLOAD ERROR ALERT RECIPIENT (the 2ND for this TIU PARAMETERS)? Y
  (Yes)
Select ALERT RECIPIENT: <Enter>
Now edit the DOCUMENT DEFINITION file:
DOCUMENT DEFINITION: DISCHARGE SUMMARY
     1    DISCHARGE SUMMARIES          DOCUMENT CLASS
     2    DISCHARGE SUMMARY          TITLE
     3    DISCHARGE SUMMARY          CLASS
     4    DISCHARGE   FINAL DISCHARGE NOTE        TITLE
CHOOSE 1-4: 2
ABBREVIATION: DCS
LAYGO ALLOWED?: YES// <Enter>
UPLOAD TARGET FILE: TIU DOCUMENT// <Enter>
Select TARGET TEXT FIELD: REPORT TEXT// <Enter>
UPLOAD LOOK-UP METHOD: D LOOKUP^TIUPUTU// <Enter>
UPLOAD POST-FILING CODE: D FOLLOWUP^TIUPUTU(TIUREC("#"))
          Replace <Enter>
UPLOAD FILING ERROR CODE: D GETPAT^TIUCHLP// <Enter>
Select CAPTION: ?
 Answer with UPLOAD CAPTIONED ASCII HEADER, or ITEM NAME, or
     FIELD NUMBER, or LOOKUP LOCAL VARIABLE NAME

     You may enter a new UPLOAD CAPTIONED ASCII HEADER, if you wish
     Answer must be 2-40 characters in length.
Select CAPTION: ??
     NOTE: Users can choose between two possible kinds of Upload Record
     Headers: Captioned or Delimited.  Captioned headers should be used
     UNLESS the site has a way to generate upload headers automatically.

     CAPTION is the caption which the transcriber enters into the captioned
     upload record header immediately preceding the item data.  It serves to
     distinguish one item of data from the next. Example: PATIENT NAME
Select CAPTION: PATIENT SSN
  CAPTION: PATIENT SSN// SOCIAL SECURITY NUMBER
  ITEM NAME: SSN// <Enter>
  FIELD NUMBER: .02// <Enter>
  LOOKUP LOCAL VARIABLE NAME: TIUSSN// <Enter>
  TRANSFORM CODE: S:X?3N1P2N1P4N.E X=$TR(X,"-/","")
          Replace <Enter>
  EXAMPLE ENTRY: 555-12-1234// <Enter>
  CLINICIAN MUST DICTATE: YES// <Enter>
  REQUIRED FIELD?: YES// ??
     This field is used to determine whether a given header item is required
     by the application (e.g., Author and Attending Physician may be required
     for the ongoing processing of a Discharge Summary).  Records lacking
     required fields WILL be entered into the target file, if possible, but
     will generate Missing Field Error Alerts.
     Choose from:
       1         YES
       0         NO
  REQUIRED FIELD?: YES// <Enter>
```

Modify Upload Parameters cont'd

```
Select CAPTION: DATE OF ADMISSION
  CAPTION: DATE OF ADMISSION// <Enter>
  ITEM NAME: ADMISSION DATE// <Enter>
  FIELD NUMBER: .07// <Enter>
  LOOKUP LOCAL VARIABLE NAME: TIUADT// <Enter>
  TRANSFORM CODE: <Enter>
  EXAMPLE ENTRY: 03/30/93// <Enter>
  CLINICIAN MUST DICTATE: YES// <Enter>
  REQUIRED FIELD?: Y  YES
Select CAPTION: DIC
     1   DICTATED BY
     2   DICTATION DATE
CHOOSE 1-2: 1
  CAPTION: DICTATED BY// <Enter>
  ITEM NAME: DICTATING PROVIDER// <Enter>
  FIELD NUMBER: 1202// <Enter>
  LOOKUP LOCAL VARIABLE NAME: <Enter>
  TRANSFORM CODE: S X=$$INAME^TIULS(X)  Replace <Enter>
  EXAMPLE ENTRY: DOOGEY P. HOWSER, M.D.  Replace <Enter>
  CLINICIAN MUST DICTATE: YES// <Enter>
  REQUIRED FIELD?: YES// <Enter>
Select CAPTION: DICTATION DATE
CAPTION: DICTATION DATE// <Enter>
  ITEM NAME: DICTATION DATE// <Enter>
  FIELD NUMBER: 1307// <Enter>
  LOOKUP LOCAL VARIABLE NAME: TIUDICDT// <Enter>
  TRANSFORM CODE: <Enter>
  EXAMPLE ENTRY: 04/03/93// <Enter>
  CLINICIAN MUST DICTATE: NO// <Enter>
  REQUIRED FIELD?: YES// <Enter>
Select CAPTION: ATTENDING PHYSICIAN
  CAPTION: ATTENDING PHYSICIAN// <Enter>
  ITEM NAME: ATTENDING PHYSICIAN// <Enter>
  FIELD NUMBER: 1209// <Enter>
  LOOKUP LOCAL VARIABLE NAME: <Enter>
  TRANSFORM CODE: S X=$$INAME^TIULS(X)  Replace <Enter>
  EXAMPLE ENTRY: MARCUS C. WELBY, M.D.  Replace <Enter>
  CLINICIAN MUST DICTATE: YES// <Enter>
  REQUIRED FIELD?: YES// <Enter>
Select CAPTION: TRANSCRIPTIONIST
  CAPTION: TRANSCRIPTIONIST// <Enter>
  ITEM NAME: TRANSCRIPTIONIST ID// <Enter>
  FIELD NUMBER: 1302// <Enter>
  LOOKUP LOCAL VARIABLE NAME: <Enter>
  TRANSFORM CODE: <Enter>
  EXAMPLE ENTRY: T1212// <Enter>
  CLINICIAN MUST DICTATE: NO// <Enter>
  REQUIRED FIELD?: <Enter>
The header for the DISCHARGE SUMMARY DOCUMENT CLASS is now defined as:
```

Modify Upload Parameters cont'd

```
$HDR:                            DISCHARGE SUMMARY
SOCIAL SECURITY NUMBER:          555-12-1234
DATE OF ADMISSION:               03/30/93
DICTATED BY:                     DOOGEY P. HOWSER, M.D.
DICTATION DATE:                  04/03/93
ATTENDING PHYSICIAN:             MARCUS C. WELBY, M.D.
TRANSCRIPTIONIST:                T1212
URGENCY:                         PRIORITY
$TXT
  DISCHARGE SUMMARY Text


*** File should be ASCII with width no greater than 80 columns.
*** Use "@@@" for "BLANKS" (word or phrase in dictation that isn't understood).
Press RETURN to continue... <Enter>
    1       Basic TIU Parameters
    2       Modify Upload Parameters
    3       Document Parameter Edit
    4       Progress Notes Batch Print Locations
    5       Division - Progress Notes Print Params
```

Modify Upload Parameters cont'd

Modifying parameters for 2nd division

```
Select TIU Parameters Menu Option: <SPACE><Enter> Modify Upload Parameters
First edit Institution-wide upload parameters:
Select INSTITUTION: 660AA  SALT LAKE DOM    UT            VAMC      660AA
         ...OK? Yes// <Enter>  (Yes)

ASCII UPLOAD SOURCE: R  remote computer
UPLOAD PROTOCOL: K  KERMIT
UPLOAD HEADER FORMAT: C  captioned
RECORD HEADER SIGNAL: $HDR
BEGIN REPORT TEXT SIGNAL: $TXT
RUN UPLOAD FILER IN FOREGROUND: NO// <Enter>  NO

Now Select upload error alert recipients:

Select ALERT RECIPIENT: BERT,AL
  Are you adding 'BERT,AL' as
    a new UPLOAD ERROR ALERT RECIPIENT (the 3RD for this TIU PARAMETERS)? Y
  (Yes)
Select ALERT RECIPIENT: MERRILL,CAROL P
  Are you adding 'MERRILL,CAROL' as
    a new UPLOAD ERROR ALERT RECIPIENT (the 4TH for this TIU PARAMETERS)? Y
  (Yes)
Select ALERT RECIPIENT: <Enter>
Now edit the DOCUMENT DEFINITION file:        ┌─────────────────────────────┐
DOCUMENT DEFINITION: <Enter> ─────────────────│ NOTE: document upload       │
                                              │ parameters are independent of│
Press RETURN to continue...<Enter>            │ hospital divisions, so they don't│
                                              │ need to be re-entered in this case.│
    1      Basic TIU Parameters               └─────────────────────────────┘
    2      Modify Upload Parameters
    3      Document Parameter Edit
    4      Progress Notes Batch Print Locations
    5      Division - Progress Notes Print Params

Select TIU Parameters Menu Option:
```

Document Parameter Edit

4. Use the option *Document Parameter Edit* to define the special processing requirements for the Discharge Summary Class consistently with those used by your site with Discharge Summary v1.0

☞ **NOTE:** If you are implementing Discharge Summary for the first time, work with clinical and administrative users at your site to determine how these parameters might best be set up.

```
Select TIU Parameters Menu Option: 3  Document Parameter Edit
First edit Institution-wide parameters:

Select DOCUMENT DEFINITION: ??
Choose from:
   PROGRESS NOTES
   DISCHARGE SUMMARY

     This is the Document Definition to which the parameters described in
     the current record apply.
NOTE: All parameters are inherited from ancestor classes or document
     classes, unless overridden at a subordinate level in the document
     definition hierarchy (e.g., if you set the parameter to require release
     for class Progress Notes, then all progress note titles will require
     release, unless the parameter is set to NO for a subordinate Document
     Class or Title for which release should not be required).

Choose from:
   60 CHARACTER ENTRY 2 2345 7893      CLASS
   ACTIVE MEDICATIONS      OBJECT
   ADDENDUM       TITLE
   ADDENDUM       DOCUMENT CLASS
   ADMISSION ASSESSMENT       TITLE
      .
      .
      .
Select DOCUMENT DEFINITION: DISCHARGE SUMMARY          CLASS
        ...OK? Yes//   (Yes)

DOCUMENT DEFINITION: DISCHARGE SUMMARY// <Enter>
REQUIRE RELEASE: YES// REQUIRE RELEASE: YES// ??
     This parameter determines whether the person entering the document will
     be required (and therefore prompted) to release the document from a
     draft state, upon exit from the entry/editing process.
     Choose from:
       1        YES
       0        NO
REQUIRE RELEASE: YES// <Enter>
```

Document Parameter Edit cont'd

```
REQUIRE MAS VERIFICATION: ??
     This parameter determines whether verification by MAS is required, prior
     to public access, and signature of the document.
     Choose from:
      1         YES
      0         NO
REQUIRE MAS VERIFICATION: 1  YES
REQUIRE AUTHOR TO SIGN: ??
     This boolean field indicates whether or not the author should sign the
     document (e.g., a discharge summary requires the signature of the
     attending physician, who may or may not himself be the author), before
     the expected cosigner.
Choose from:
      1         YES
      0         NO
REQUIRE AUTHOR TO SIGN: Y  YES
ROUTINE PRINT EVENT(S): ??
     These are the processing events (e.g., release, verification, or both)
     on which documents of the type specified should be automatically
     printed.
     Choose from:
      R         release
      V         verification
      B         both
ROUTINE PRINT EVENT(S): B  both
STAT PRINT EVENT(S): ??
     Indicate the processing event(s) (e.g., release, verification, or both)
     on which STAT documents of the specified type will be printed for the
     chart to the device indicated.
     Choose from:
      R         release
      V         verification
      B         both
STAT PRINT EVENT(S): B  both
MANUAL PRINT AFTER ENTRY: ??
     Though primarily implemented for PROGRESS NOTES, this parameter may be
     useful for any document for which a hard copy is desirable following
     entry.  If set to YES, the user will be prompted to print a copy
     on exit from their preferred editor.
     Choose from:
      1         YES
      0         NO
MANUAL PRINT AFTER ENTRY: N  NO
ALLOW CHART PRINT OUTSIDE MAS: ??
     This field indicates whether the non-MAS user (e.g., providers) may
     print copies of the document for the chart.

     Generally, this will be set to YES for PROGRESS NOTES, which are likely
     to be printed on the Ward or in the Clinic for immediate inclusion in the
     chart, and to NO for DISCHARGE SUMMARIES, which are typically printed
     centrally, and for which extraneous or duplicate CHART COPIES are a
     particular problem.
```

Document Parameter Edit cont'd

```
        Choose from:
          1         YES
          0         NO
ALLOW CHART PRINT OUTSIDE MAS: N  NO
ALLOW >1 RECORDS PER VISIT: NO// ??
        This field determines whether a given document may be created more than
        once per visit.  For example, it may be necessary and appropriate to
        enter multiple Nurses Notes for a single hospitalization, although only
        one discharge summary may be entered for that care episode.
        Choose from:
          1         YES
          0         NO
ALLOW >1 RECORDS PER VISIT: NO// <Enter>
ENABLE IRT INTERFACE: ??
        This enables TIU's interface with Incomplete Record Tracking, which will
        update deficiencies when transcription, signature, or cosignature
        (review) events are registered for a given document.
        Choose from:
          0         NO
          1         YES
ENABLE IRT INTERFACE: Y  YES
IRT DEFICIENCY: DISCHARGE SUMMARY// ??
        This field provides for a mapping between the TIU DOCUMENT DEFINITION
        and the corresponding IRT DEFICIENCY TYPE (e.g., Document Class
        Discharge  Summary maps to Deficiency Type Discharge Summary, while
        Document type LIPID CLINIC NOTE maps to Deficiency Type DRS PROGRESS
        NOTES, etc.).

Choose from:
     DISCHARGE SUMMARY
IRT DEFICIENCY: DISCHARGE SUMMARY// <Enter>
SUPPRESS DX/CPT ON NEW VISIT: ??
        Please indicate whether to suppress prompting for Diagnostic and
        Procedure codes following signature of a document where an Ambulatory or
        Telephone visit was created when the document was first entered.

 NOTE: If you set this parameter to YES, you will need to capture this
        information by some other uniform means (e.g., an AICS encounter form,
        etc.) in order to receive workload credit for these visits.
        Choose from:
          1         YES
          0         NO
SUPPRESS DX/CPT ON NEW VISIT: <Enter>
FORCE RESPONSE TO EXPOSURES: ??
        This parameter determines whether the user will be forced to enter a Yes
        or No response when asked to specify the Service Connection
        Classification of a Veteran, when creating a standalone visit (i.e., AO,
        IR, or EC).
        Choose from:
          1         YES
          0         NO
```

Document Parameter Edit cont'd

```
FORCE RESPONSE TO EXPOSURES:
ASK DX/CPT ON ALL OPT VISITS: ??
     Please indicate whether the Diagnosis and Procedural questions should be
     asked on Scheduled Appointments, in addition to Walk-ins and Telephone
     (i.e., Standalone) Encounters.
     Choose from:
       1        YES
       0        NO
ASK DX/CPT ON ALL OPT VISITS: EDITOR SET-UP CODE: **??**
     This is MUMPS code to be executed prior to invoking the user's preferred
     editor through ^DIWE.  It will ordinarily set local variables to be used
     in the editor's header, etc.

EDITOR SET-UP CODE: **<Enter>**

If document is to be uploaded, specify Filing Alert Recipients:

Select FILING ERROR ALERT RECIPIENTS: **CLARENCE,RICHARD**
Are you adding 'CLARENCE,RICHARD' as a new FILING ERROR ALERT RECIPIENTS (the
1ST for this TIU DOCUMENT PARAMETERS)? **Y**  (Yes)
Select FILING ERROR ALERT RECIPIENTS: **<Enter>**
```

If your site wishes to route alerts for filing errors to different recipients by document type (Discharge Summary alerts to one MRT, Operative Report alerts to another, etc.), this is where to specify that.

Document Parameter Edit cont'd

```
Now enter the USER CLASSES for which cosignature will be required:
Select USERS REQUIRING COSIGNATURE: ??
     Please indicate which groups of users (i.e., User Classes) require
     cosignature for the type of document in question.

Choose from:
    ACTING DIRECTOR
    ADDICTION MEDICINE
    ADP COORDINATOR
    ADP SECURITY OFFICER
Select USERS REQUIRING COSIGNATURE: <Enter>

Now enter the DIVISIONAL parameters:

Select DIVISION: ??
     This is the Medical Center Division for which the parameters are being
     defined.

Choose from:
    1              SALT LAKE CITY      660
    2              SALT LAKE DOM       660AA

Select DIVISION: 1  SALT LAKE CITY        660
  Are you adding 'SALT LAKE CITY' as a new DIVISION (the 1ST for this TIU
DOCUMENT PARAMETERS)? Y
  (Yes)
  CHART COPY PRINTER: LASERJET 4SI    MARCIE'S CUBE       _LTA318:
  STAT CHART COPY PRINTER: LAZER      PRINTER ROOM LN11 12 PITCH      _LTA36:

Select DIVISION: 660AA  SALT LAKE DOM         660AA
  Are you adding 'SALT LAKE DOM' as a new DIVISION (the 2ND for this TIU
DOCUMENT PARAMETERS)? Y  (Yes)
  CHART COPY PRINTER: LTA35           C-ITOH 300 LINE PRINTER      _LTA35
STAT CHART COPY PRINTER: LTA35        C-ITOH 300 LINE PRINTER      _LTA35
Select DIVISION: <Enter>

Press RETURN to continue...<Enter>
```

It's important to define this parameter for Progress Notes. It doesn't apply for Discharge Summaries, because, unless the author is also the Attending Physician, ALL users require a cosignature.

Progress Notes Example of Modify Upload Parameters

```
    1       Basic TIU Parameters
    2       Modify Upload Parameters
    3       Document Parameter Edit
    4       Progress Notes Batch Print Locations
    5       Division - Progress Notes Print Params

Select TIU Parameters Menu Option: Modify Upload Parameters
First edit Institution-wide upload parameters:

Select INSTITUTION:    SALT LAKE CITY
ASCII UPLOAD SOURCE: remote computer// <Enter>
UPLOAD PROTOCOL: KERMIT//  <Enter>
UPLOAD HEADER FORMAT: captioned// ^
Now edit the DOCUMENT DEFINITION file:
DOCUMENT DEFINITION: PROGRESS NOTES          CLASS
ABBREVIATION: PN//  <Enter>
LAYGO ALLOWED?: YES// <Enter>
UPLOAD TARGET FILE: TIU DOCUMENT// <Enter>
Select TARGET TEXT FIELD: REPORT TEXT// <Enter>
UPLOAD LOOK-UP METHOD: D LOOKUP^TIUPUTPN// <Enter>
UPLOAD POST-FILING CODE: D FOLLOWUP^TIUPUTPN(TIUREC("#"))
          Replace <Enter>
UPLOAD FILING ERROR CODE: D GETPN^TIUCHLP//<Enter>
Select CAPTION: LOCATION//<Enter>
  CAPTION: LOCATION// <Enter>
  ITEM NAME: PATIENT LOCATION// <Enter>
  FIELD NUMBER: 1205// <Enter>
  LOOKUP LOCAL VARIABLE NAME: TIULOC// <Enter>
  TRANSFORM CODE: <Enter>
  EXAMPLE ENTRY: MEDICAL-CONSULT 6200  Replace <Enter>
  CLINICIAN MUST DICTATE: YES// <Enter>
  REQUIRED FIELD?: YES// <Enter>
Select CAPTION: <Enter>
```

☞ **Note:**   Some sites have defined additional captions for administrative use in resolving discrepancies. If you define additional captions *do not include field numbers for them*. Doing so can cause data to be overwritten with incorrect transcription data. For example, PATIENT may be overwritten with an incorrect patient.

Modify Upload Parameterscont'd

```
The header for the Progress Notes CLASS is now defined as:

$HDR:                           PROGRESS NOTES
TITLE:                          ADTC (AMB DIAG TREAT CENTER)
SSN:                            555-12-1234
VISIT/EVENT DATE:               3/2/96@14:00
AUTHOR:                         HOWSER,DOOGEY
TRANSCRIBER:                    K5420
DATE/TIME OF DICT:              4/4/96
LOCATION:                       MEDICAL-CONSULT 6200
$TXT
  PROGRESS NOTES Text


*** File should be ASCII with width no greater than 80 columns.
*** Use "@@@" for "BLANKS" (word or phrase in dictation that isn't
understood).
```

Setting up Consult/Request Tracking in TIU

You can set Consults up as a separate Class (comparable to Discharge Summary or Progress Notes) or you can define Consults as a Document Class under Progress Notes. There are pros and cons to either strategy.

A: Create Consults as an independent CLASS, under Clinical Documents
Pro: 1. Provides a *clear* separation of Consults from Progress Notes, and minimizes the number of choices for the end-user.
    2. Simple, with few concerns for maintainability (e.g., no question as to whether heritable methods and properties of Progress Notes were appropriately overridden, etc.).
Con: 1. Not necessarily consistent with the way providers have been documenting their Consult Results in the past. (i.e., if they've been using PN titles to "result" consults, and referring to the notes on the 513's in the past, this will be a departure from that practice).
    2. Limits flexibility of access to the information. (i.e., if set up this way, they may only access the data through Integrated Document Management options on the TIU side, and through the Consults tab of the CPRS chart).

B: Create Consults as a Document Class under Progress Notes.
Pro: 1. Consistent with the way many providers have been documenting their Consult Results in the past.
    2. Enhances flexibility of access to the information. (allows access to data through any option in TIU, as well as through *either* the Consults or Progress Notes tabs of the CPRS chart).
Con: 1. Does not provide a clear separation of Consults from Progress Notes, and may offer too many choices for the end-user.
    2. Complex, with some concerns for maintainability (e.g., if printing or filing appear incorrect, may result from heritable methods and properties of Progress Notes not being appropriately overridden, etc.).

TIU, cont'd

Define CONSULTS for TIU/CT Interface

Patch TIU*1.0*4 contains an option that allows you to set Consults up as part of the Document Definition hierarchy. The following is a description of the option and the other steps necessary for allowing Consults to be accessed through TIU and CPRS.

1. Select the option *Define Consults for TIU/CT Interface* and enter the relevant information.

```
Select OPTION NAME: TIU DEFINE CONSULTS      Define CONSULTS for
TIU/CT Interface
Define CONSULTS for TIU/CT Interface

I'm going to create a new Document Definition for CONSULTS now.

GREAT! A new Document Definition has been created for CONSULTS.
Next, you need to decide whether you want CONSULTS to be set up
as a separate CLASS (comparable to DISCHARGE SUMMARY or PROGRESS
NOTES), or whether you want CONSULTS defined as a DOCUMENT CLASS
under PROGRESS NOTES. The benefits of each strategy are outlined
in the POST-INSTALLATION instructions for this patch.

NOTE: If you're not yet CERTAIN which strategy you want your site
to adopt, then quit here, and get consensus first (it's easier to
get permission than forgiveness, in this case)!

    Select one of the following:

        CL          Class
        DC          Document Class

Define CONSULTS as a CLASS or DOCUMENT CLASS: DC  Document Class

Okay, you've indicated that you want to make CONSULTS a Document Class.

 Okay to continue? NO// YES

FANTASTIC! Your NEW DOCUMENT CLASS CONSULTS will now be added under
the PROGRESS NOTES Class...

Okay, I'm done...Please finish your implementation of CONSULTS by adding
any Titles as appropriate using the Create Document Definitions Option
under the TIUF DOCUMENT DEFINITION MGR Menu, as described in Step #3 of
the Post-Installation Instructions.

Press RETURN to continue...
```

TIU, cont'd

2. You can verify that the upload header is appropriately defined for Consults using the option [TIU UPLOAD HELP]. The output will look something like this:

```
<Message Header Signal>:              CONSULTS
TITLE:                                CARDIOLOGY CONSULT
SSN:                                  555-12-1234
VISIT/EVENT DATE:                     5/13/97@08:00
AUTHOR:                               HOWSER,DOOGEY
TRANSCRIBER:                          K5420
DATE/TIME OF DICTATION:               5/13/97@11:00
LOCATION:                             MEDICAL-CONSULT 6200
EXPECTED COSIGNER:                    WELBY,MARCUS
CONSULT REQUEST NUMBER:               1455
<Begin Text Signal>
 CONSULTS Text
```

- File should be ASCII with width no greater than 80 columns.
- Use "@@@" for "BLANKS" (word or phrase in dictation that isn't understood), where <Message Header Signal> and <Begin Text Signal> will appear as you've defined them in your Upload Parameters for your site (e.g., $HDR and $TXT, etc.).

Another way of verifying this setup is to use the [MODIFTY UPLOAD PARAMETERS OPTION] as in this example:

```
Select TIU Parameters Menu Option: 2  Modify Upload Parameters
First edit Institution-wide upload parameters:

Select INSTITUTION:    SALT LAKE CITY HCS<Enter>
ASCII UPLOAD SOURCE: remote computer//<Enter>
UPLOAD PROTOCOL: KERMIT// <Enter>
UPLOAD HEADER FORMAT: captioned//<Enter>
RECORD HEADER SIGNAL: $HDR//<Enter>
BEGIN REPORT TEXT SIGNAL: $TXT//<Enter>
RUN UPLOAD FILER IN FOREGROUND: YES//<Enter>

Now Select upload error alert recipients:

Select ALERT RECIPIENT: SCRIPTION,BERTRAND//<Enter>
Now edit the DOCUMENT DEFINITION file:
DOCUMENT DEFINITION: CONSULTS
     1    CONSULTS        DOCUMENT CLASS
     2    CONSULTS CLASS (RETIRED)       CLASS
     3    CONSULTS  BAD MEDICINE CONSULTS DC     DOCUMENT CLASS
     4    CONSULTS  MEDICINE CS CONSULTS     TITLE
     5    CONSULTS  BAD MEDICINE CONSULTS      TITLE
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 1  CONSULTS     DOCUMENT CLASS
```

Verify Consults Setup cont'd

```
ABBREVIATION: CNST//<Enter>
LAYGO ALLOWED: YES//<Enter>
UPLOAD TARGET FILE: TIU DOCUMENT//<Enter>
Select TARGET TEXT FIELD: REPORT TEXT//<Enter>
UPLOAD LOOK-UP METHOD: D LOOKUP^TIUPUTCN//<Enter>
UPLOAD POST-FILING CODE: D FOLLOWUP^TIUPUTCN(TIUREC("#"))
          Replace<Enter>
UPLOAD FILING ERROR CODE: D GETPN^TIUCHLP//<Enter>
Select CAPTION: CONSULT REQUEST NUMBER//<Enter>
  CAPTION: CONSULT REQUEST NUMBER  Replace<Enter>
  ITEM NAME: CONSULT REQUEST #//<Enter>
  FIELD NUMBER: 1405//<Enter>
  LOOKUP LOCAL VARIABLE NAME: TIUCNNBR//<Enter>
  TRANSFORM CODE: S X="C."_X//<Enter>
  EXAMPLE ENTRY: 1455//<Enter>
  CLINICIAN MUST DICTATE: YES//<Enter>
  REQUIRED FIELD?: YES//<Enter>
Select CAPTION: AUTHOR
  CAPTION: AUTHOR// <Enter>
  ITEM NAME: DICTATING PROVIDER//<Enter>
  FIELD NUMBER: 1202//<Enter>
  LOOKUP LOCAL VARIABLE NAME: <Enter>
  TRANSFORM CODE: <Enter>
  EXAMPLE ENTRY: HOWSER,DOOGEY//<Enter>
  CLINICIAN MUST DICTATE: YES//<Enter>
  REQUIRED FIELD?: YES//<Enter>
Select CAPTION: DATE/TIME OF DICTATION
  CAPTION: DATE/TIME OF DICTATION  Replace<Enter>
  ITEM NAME: DICTATION DATE/TIME//<Enter>
  FIELD NUMBER: 1301//<Enter>
  LOOKUP LOCAL VARIABLE NAME: TIUDDT//<Enter>
  TRANSFORM CODE: <Enter>
  EXAMPLE ENTRY: 5/16/97@09:25//<Enter>
  CLINICIAN MUST DICTATE: NO//<Enter>
  REQUIRED FIELD?: YES//<Enter>
Select CAPTION: EXPECTED COSIGNER
  CAPTION: EXPECTED COSIGNER//<Enter>
  ITEM NAME: EXPECTED COSIGNER//<Enter>
  FIELD NUMBER: 1208//<Enter>
  LOOKUP LOCAL VARIABLE NAME: <Enter>
  TRANSFORM CODE: <Enter>
  EXAMPLE ENTRY: WELBY,MARCUS//<Enter>
  CLINICIAN MUST DICTATE: YES//<Enter>
  REQUIRED FIELD?: NO//<Enter>
Select CAPTION: LOCATION
  CAPTION: LOCATION//<Enter>
  ITEM NAME: PATIENT LOCATION//<Enter>
  FIELD NUMBER: 1205//<Enter>
  LOOKUP LOCAL VARIABLE NAME: TIULOC//<Enter>
  TRANSFORM CODE: <Enter>
  EXAMPLE ENTRY: MEDICAL-CONSULT 6200  Replace<Enter>
```

Verify Consults Setup cont'd

```
  CLINICIAN MUST DICTATE: YES//<Enter>
  REQUIRED FIELD?: YES//<Enter>
Select CAPTION: SSN
  CAPTION: SSN//<Enter>
  ITEM NAME: PATIENT SSN//<Enter>
  FIELD NUMBER: .02//<Enter>
  LOOKUP LOCAL VARIABLE NAME: TIUSSN//<Enter>
  TRANSFORM CODE: S X=$TR(X,"-/","")// <Enter>
  EXAMPLE ENTRY: 555-12-1234//<Enter>
  CLINICIAN MUST DICTATE: YES//<Enter>
  REQUIRED FIELD?: YES//<Enter>
Select CAPTION: VISIT/EVENT DATE
  CAPTION: VISIT/EVENT DATE//<Enter>
  ITEM NAME: VISIT/EVENT DATE/<Enter>/
  FIELD NUMBER: .07//<Enter>
  LOOKUP LOCAL VARIABLE NAME: TIUVDT//<Enter>
  TRANSFORM CODE: <Enter>
  EXAMPLE ENTRY: 5/15/97@08:15//<Enter>
  CLINICIAN MUST DICTATE: YES//<Enter>
  REQUIRED FIELD?: YES//<Enter>
Select CAPTION: TITLE
  CAPTION: TITLE//<Enter>
  ITEM NAME: TITLE OF CONSULT//<Enter>
  FIELD NUMBER: .01//<Enter>
  LOOKUP LOCAL VARIABLE NAME: TIUTITLE//<Enter>
  TRANSFORM CODE: <Enter>
  EXAMPLE ENTRY: PULMONARY CONSULT//<Enter>
  CLINICIAN MUST DICTATE: YES//<Enter>
  REQUIRED FIELD?: YES//<Enter>
Select CAPTION:<Enter>
```

☞ **Note:** Some sites have defined additional captions for administrative use in resolving discrepancies. If you define additional captions *do not include field numbers for them*. Doing so can cause data to be overwritten with incorrect transcription data. For example, PATIENT may be overwritten with an incorrect patient.

```
The header for the CONSULTS DOCUMENT CLASS is now defined as:

$HDR:                        CONSULTS
TITLE:                       PULMONARY CONSULT
SSN:                         555-12-1234
VISIT/EVENT DATE:            5/15/97@08:15
AUTHOR:                      HOWSER,DOOGEY
DATE/TIME OF DICTATION:      5/16/97@09:25
LOCATION:                    MEDICAL-CONSULT 6200
EXPECTED COSIGNER:           WELBY,MARCUS
CONSULT REQUEST NUMBER:      1455
```

Verify Consults Setup cont'd

```
$TXT
  CONSULTS Text
$EOM

*** File should be ASCII with width no greater than 80 columns.
*** Use "@@@" for "BLANKS" (word or phrase in dictation that isn't understood).
```

3. Use the *Create Document Definitions* option [TIUFC CREATE DDEFS MGR], under the IRM Maintenance Menu option [TIU IRM MAINTENANCE MENU], to construct a new document definition sub-tree for Consults that looks something like this:

```
Edit Document Definitions      Sep 03, 1997 11:59:04     Page:    1 of   1
BASICS
         Name                                                         Type
 1       CLINICAL DOCUMENTS                                           CL
 2        +DISCHARGE SUMMARY                                          CL
 3        +PROGRESS NOTES                                             CL
 4           CONSULTS                                                 DC
 5             MEDICINE CONSULTS                                      DC
 6               MEDICINE CONSULT                                     TL
 7               ENDOSCOPY                                            TL
 8             CARDIOLOGY CONSULTS                                    DC
 9               CARDIOLOGY COSULT                                    TL
10               ELECTROCARDOGRAM                                     TL
11               ECHOCARDIOGRAM INTERPRETATION                        TL
12        +ADDENDUM                                                   DC
   ?Help    >ScrollRight    PS/PL PrintScrn/List    +/-              >>>
   Expand/Collapse      Detailed Display/Edit    Items: Seq Mnem MenuTxt
   Jump to Document Def  Status...                Delete
   Boilerplate Text     Name/Owner/PrintName...   Copy/Move
Select Action: Quit//
```

TIU, cont'd

The example above suggests a Service-oriented set of Document Classes with one or more titles under each. Of course, just like Progress Notes, these can include boilerplate text with embedded objects. It will probably take some time, with substantial cooperation between your Clinical Coordinator, IRMS, and the Consulting Services, to develop a complete set of Document Definitions for Consults at your site.

4. Next, define a set of Document Parameters for the new Consults class, using the Document Parameter Edit [TIU DOCUMENT PARAMETER EDIT] option under the TIU IRM MAINTENANCE MENU option, as follows:

```
   1       TIU Parameters Menu ...
   2       Document Definitions (Manager) ...
   3       User Class Management ...

Select TIU Maintenance Menu Option: 1  TIU Parameters Menu

   1       Basic TIU Parameters
   2       Modify Upload Parameters
   3       Document Parameter Edit
   4       Progress Notes Batch Print Locations
   5       Division - Progress Notes Print Params

Select TIU Parameters Menu Option: DOCument Parameter Edit

First edit Institution-wide parameters:

Select DOCUMENT DEFINITION: CONSULTS          DOCUMENT CLASS
        ...OK? Yes// <Enter>  (Yes)

DOCUMENT DEFINITION: CONSULTS// <Enter>
REQUIRE RELEASE: n      NO
REQUIRE MAS VERIFICATION: u      UPLOAD ONLY
REQUIRE AUTHOR TO SIGN: y      YES
ROUTINE PRINT EVENT(S): <Enter>
STAT PRINT EVENT(S): <Enter>
MANUAL PRINT AFTER ENTRY: y      YES
ALLOW CHART PRINT OUTSIDE MAS: y      YES
ALLOW >1 RECORDS PER VISIT: n      NO
ENABLE IRT INTERFACE: <Enter>
SUPPRESS DX/CPT ON NEW VISIT: <Enter>
EDITOR SET-UP CODE: <Enter>                          ┌──────────────┐
                                                     │ Identify local│
If document is to be uploaded, specify Filing Alert Recipients: │ recipients as │
                                                     │ appropriate.  │
Select FILING ERROR ALERT RECIPIENTS:                └──────────────┘

Now enter the USER CLASSES for which cosignature will be required:
```

```
Select USERS REQUIRING COSIGNATURE: STUDENT/
Now enter the DIVISIONAL parameters:

Select DIVISION: [optional...you probably won't need to set up
auto-printing devices]

Press RETURN to continue...
```

Identify per
local
requirements

5. Finally, use the option to Manage Business Rules, under the User Class Management
Menu to specify the following rules, allowing Linking (or re-linking) of TIU
documents with "requests" in a client application:

```
1   An UNSIGNED (CLASS) CLINICAL DOCUMENT may be LINKED by An AUTHOR/DICTATOR

2   An UNCOSIGNED (CLASS) CLINICAL DOCUMENT may be LINKED by An EXPECTED
    COSIGNER

3   A COMPLETED (CLASS) CLINICAL DOCUMENT may be LINKED by A CHIEF, MIS

4   An UNSIGNED (CLASS) CLINICAL DOCUMENT may be LINKED by A MEDICAL
    RECORDS TECHNICIAN
```

TIU Document Parameter Inheritance

TIU Document Parameters are set with the option *Document Parameter Edi* on the TIU Maintenance Menu:

```
TIU Maintenance Menu [TIU IRM MAINTENANCE MENU]
    TIU Parameters Menu [TIU SET-UP MENU]
        Document Parameter Edit [TIU DOCUMENT PARAMETER EDIT]
```

At present, document parameters are *not* independently heritable.

Therefore, if one of these parameters is set for a given Document Definition, then *all* parameters set at higher Document Definition levels are ignored for that Document Definition. For example, if you set one of these parameters for the Title POSTOPERATIVE NOTE, then any other parameters which should hold for POSTOPERATIVE NOTE must also be explicitly set at that level; they are *not* inherited from higher levels.

Example:

Suppose you want residents to require cosignature, but only for the Title POSTOPERATIVE NOTE. To accomplish this, use the option *Document Parameter Edit*, select Title POSTOPERATIVE NOTE, and set the parameter USERS REQUIRING COSIGNATURE to User Class RESIDENT PHYSICIAN. Then residents will require cosignature for the Title POSTOPERATIVE NOTE.

We show this process in several steps in the screen captures on the next page. We first set the parameter USERS REQUIRING COSIGNATURE for Title POSTOPERATIVE NOTE, leaving other parameters alone. Then we look up parameter values for PROGRESS NOTES. Last, we set previously inherited parameter values for POSTOPERATIVE NOTE:

Example: Setting Cosignature Requirement

```
Select TIU Parameters Menu Option: 3  Document Parameter Edit
First edit Institution-wide parameters:

Select DOCUMENT DEFINITION: POSTOPERATIVE NOTE           TITLE
  Are you adding 'POSTOPERATIVE NOTE' as
    a new TIU DOCUMENT PARAMETERS (the 12TH)? No// Y  (Yes)
DOCUMENT DEFINITION: POSTOPERATIVE NOTE// <Enter>
REQUIRE RELEASE: <Enter>
REQUIRE MAS VERIFICATION: <Enter>
REQUIRE AUTHOR TO SIGN: <Enter>

ROUTINE PRINT EVENT(S): <Enter>
STAT PRINT EVENT(S): <Enter>
MANUAL PRINT AFTER ENTRY: <Enter>
ALLOW CHART PRINT OUTSIDE MAS: <Enter>
ALLOW >1 RECORDS PER VISIT: <Enter>
ENABLE IRT INTERFACE: <Enter>
SUPPRESS DX/CPT ON NEW VISIT: <Enter>
EDITOR SET-UP CODE: <Enter>


If document is to be uploaded, specify Filing Alert Recipients:

Select FILING ERROR ALERT RECIPIENTS:
```

Now enter the USER CLASSES for which cosignature will be required:

```
Select USERS REQUIRING COSIGNATURE: RESIDENT PHYSICIAN
  Are you adding 'RESIDENT PHYSICIAN' as a new USERS REQUIRING
COSIGNATURE (the 1ST for this TIU DOCUMENT PARAMETERS)?
 No// Y (Yes)
Select USERS REQUIRING COSIGNATURE:

Now enter the DIVISIONAL parameters:

Select DIVISION:
```

This accomplishes the goal for residents for POSTOPERATIVE NOTES. But, in creating this new entry, we have overridden ALL previously inherited document parameter values for POSTOPERATIVE NOTES.

If we want POSTOPERATIVE NOTE to function like other notes (apart from requiring cosignature for residents), we'll need to enter the parameter values for POSTOPERATIVE NOTE that it previously inherited. Use the option *Document Parameter Edit* and select Class PROGRESS NOTES to see what values PROGRESS NOTES has on your system. Don't change the values; just take the defaults so you can look at them. Your values may be different from ours.

Example: Re-entering parameter values

```
Select TIU Parameters Menu Option:  Document Parameter Edit
First edit Institution-wide parameters:

Select DOCUMENT DEFINITION: PROGRESS NOTES   TITLE
          ...OK? Yes// <Enter>  (Yes)

DOCUMENT DEFINITION: PROGRESS NOTES// <Enter>
REQUIRE RELEASE: NO  NO
REQUIRE MAS VERIFICATION: NO  NO
REQUIRE AUTHOR TO SIGN: Y  YES
ROUTINE PRINT EVENT(S): <Enter>
STAT PRINT EVENT(S): <Enter>
MANUAL PRINT AFTER ENTRY: YES// <Enter>
ALLOW CHART PRINT OUTSIDE MAS: YES// <Enter>
ALLOW >1 RECORDS PER VISIT: YES// <Enter>
ENABLE IRT INTERFACE: <Enter>
SUPPRESS DX/CPT ON NEW VISIT: <Enter>
EDITOR SET-UP CODE: <Enter>

If document is to be uploaded, specify Filing Alert Recipients:

Select FILING ERROR ALERT RECIPIENTS: CLERK,F.W.D. // <Enter>

Now enter the USER CLASSES for which cosignature will be required:

Select USERS REQUIRING COSIGNATURE: STUDENT// <Enter>

Now enter the DIVISIONAL parameters: <Enter>

Select DIVISION: SALT LAKE CITY// <Enter>
  CHART COPY PRINTER:  LASER//<Enter>
  STAT CHART COPY PRINTER: <Enter>
Select DIVISION: <Enter>
```

☞ **NOTE:**   If TIU Document Parameters are defined for the Document Class
               parent of the Title POSTOPERATIVE NOTES, look up and fill in
               those values instead of the values for PROGRESS NOTES.

Example, cont'd

Now edit parameters for POSTOPERATIVE NOTE again, and fill in the values *your site* is using for PROGRESS NOTES:

```
Select TIU Parameters Menu Option:  Document Parameter Edit
First edit Institution-wide parameters:

Select DOCUMENT DEFINITION: POSTOPERATIVE NOTE          TITLE
         ...OK? Yes// <Enter>  (Yes)


DOCUMENT DEFINITION: POSTOPERATIVE NOTE// <Enter>
REQUIRE RELEASE: NO   NO
REQUIRE MAS VERIFICATION: NO   NO
REQUIRE AUTHOR TO SIGN: Y   YES
ROUTINE PRINT EVENT(S): <Enter>

STAT PRINT EVENT(S): <Enter>
MANUAL PRINT AFTER ENTRY: Y   YES
ALLOW CHART PRINT OUTSIDE MAS: Y   YES
ALLOW >1 RECORDS PER VISIT: Y   YES
ENABLE IRT INTERFACE: <Enter>

SUPPRESS DX/CPT ON NEW VISIT: <Enter>

EDITOR SET-UP CODE: <Enter>


If document is to be uploaded, specify Filing Alert Recipients:

Select FILING ERROR ALERT RECIPIENTS:   CLERK,F.W.D.           FWDC
MEDICAL RECORD TECHNICIAN
Are you adding 'CLERK,F.W.D.' as a new FILING ERROR ALERT RECIPIENTS
(the 1ST for this TIU DOCUMENT PARAMETERS)? No// Y (Yes)
Select FILING ERROR ALERT RECIPIENTS:


Now enter the USER CLASSES for which cosignature will be required:

Select USERS REQUIRING COSIGNATURE: RESIDENT PHYSICIAN
         // STUDENT
 Are you adding 'STUDENT' as a new USERS REQUIRING COSIGNATURE (the
2ND for this TIU DOCUMENT PARAMETERS)? No// Y (Yes)
Select USERS REQUIRING COSIGNATURE: <Enter>


Now enter the DIVISIONAL parameters: <Enter>

Select DIVISION: SALT LAKE CITY          660
  Are you adding 'SALT LAKE CITY' as a new DIVISION (the 1ST for this
TIU DOCUMENT PARAMETERS)? No// Y (Yes)
  CHART COPY PRINTER:   LASER       PRINTER ROOM LN11 12 PITCH
_LTA36:
  STAT CHART COPY PRINTER:

Select DIVISION:
```

Example, cont'd

Notice that we added User Class STUDENT to the USERS REQUIRING COSIGNATURE multiple as well as filling in other parameters.

☞ **NOTE:** We split this edit into two separate steps for clarity, but it is more efficient to edit all parameters for POSTOPERATIVE NOTE in a single step, assuming you know what values it previously inherited.

If, in the future, TIU Document Parameters are made independently heritable, then the extra parameters you add now will become redundant. You shouldn't have to remove them.

Stub Document Parameters

It follows from what we said earlier about TIU Document Parameter inheritance that stub parameters are not harmless.

Example: Suppose you enter the following:

```
Select TIU Parameters Menu Option:  Document Parameter Edit
First edit Institution-wide parameters:

Select DOCUMENT DEFINITION: POSTOPERATIVE NOTE            TITLE
        ...OK? Yes// <Enter>  (Yes)


DOCUMENT DEFINITION: POSTOPERATIVE NOTE//<Enter>
```

Now, suppose you delete all values for POSTOPERATIVE NOTE, (or if POSTOPERATIVE NOTE is new, suppose you don't enter any values). Then, since POSTOPERATIVE NOTE still exists as a TIU Document Parameters entry, it overrides any values that it might have inherited from a higher document definition. To avoid this override, you must delete the Document Parameter entry POSTOPERATIVE NOTE itself, not just all of its values.

Progress Notes Batch Print Locations

Use this option for entering hospital locations used for TIU PRINT PN OUTPT
LOC and TIU PRINT PN WARD options. If locations are not entered in this file
they will not be selectable from these options.

```
Select TIU Maintenance Menu Option: 1  TIU Parameters Menu

   1      Basic TIU Parameters
   2      Modify Upload Parameters
   3      Document Parameter Edit
   4      Progress Notes Batch Print Locations
   5      Division - Progress Notes Print Params

Select TIU Parameters Menu Option: 4  Progress Notes Batch Print Locations

Select Clinic or Ward: TELEPHONE TRIAGE - PSYCHIATRY
PROGRESS NOTES DEFAULT PRINTER: LASERJET 4SI// <Enter>
EXCLUDE FROM PN BATCH PRINT: ?
 Set to '1' progress notes for this location will not be included
 in the progress notes outpatient batch print job [TIU PRINT PN
 BATCH].You would do this if you wanted to print the CHART copies
 of the notes for this location in the clinic and not in the file
 room.
     Choose from:
        1       YES

EXCLUDE FROM PN BATCH PRINT: YES

Select Clinic or Ward:<Enter>

   1      Basic TIU Parameters
   2      Modify Upload Parameters
   3      Document Parameter Edit
   4      Progress Notes Batch Print Locations
   5      Division - Progress Notes Print Params
Select TIU Parameters Menu Option: <Enter>
```

1. DIVISION must be defined in file #8925.94 (TIU DIVISION PRINT PRINT
    PARAMETERS FILE).

2. The variable TIUDIV must be defined in the VARIABLE NAME multiple of the OPTION
    SCHEDULING FILE (#19.2). TIUDIV should be set to the IEN of the DIVISION in the
    MEDICAL CENTER DIVISION FILE (#40.8). This pointer value is also stored in the .01
    field of the TIU DIVISION PRINT PARAMETERS FILE (#8925.94).

3. This option must find a valid date in field #1.01 of file #8925.94 to start looping on. If a
    valid date is not found, the option will terminate with this message.

4. To assist in troubleshooting, if no notes are found, the DATE/TIME field (#1.01) of file
    #8925.94 will not be re-set to the new value (which is NOW) when the option begins
    calculating.

Division - Progress Notes Print Parameters

These parameters are used by the TIU PRINT PN BATCH INTERACTIVE and TIU PRINT PN BATCH SCHEDULED options. If your site wants a footer other than what is returned by $$SITE^ VASITE, the .02 field of the 1st entry in this file will be used. For example, Waco-Temple-Marlin can have the institution of their progress notes as "CENTRAL TEXAS HCF." If there are no TIU Division Parameters and your site has an Integration Name, the Integration Name will be used.

```
Select TIU Maintenance Menu Option: 1  TIU Parameters Menu

   1      Basic TIU Parameters
   2      Modify Upload Parameters
   3      Document Parameter Edit
   4      Progress Notes Batch Print Locations
   5      Division - Progress Notes Print Params

Select TIU Parameters Menu Option: 5  Division - Progress Notes
Print Params

Select Division for PNs Outpatient Batch Print: ?
 Answer with TIU DIVISION PRINT PARAMETERS, or NUMBER:
   1                SALT LAKE CITY

     You may enter a new TIU DIVISION PRINT PARAMETERS, if you
     wish. Select the DIVISION these print parameters apply to.
 Answer with MEDICAL CENTER DIVISION NUM, or NAME:
   1                SALT LAKE CITY       660

Select Division for PNs Outpatient Batch Print: YOUR HOSPITAL
         ...OK? Yes// <Enter>  (Yes)

LOCATION TO PRINT ON FOOTER: ??
     The name of this division as it should appear in the footer
     of the progress notes and forms printed using the terminal
     outpatient sort.  This is useful for sites that want
     digit something other than what the external value of
     this division returned by $$SITE^VASITE.  For example, the
     Waco division of the Central Texas Health Care System may
     want Central Texas HCS- Waco to appear in the footer instead
     of WACO VAMC.
LOCATION TO PRINT ON FOOTER: CENTRAL ANYWHERE
PROGRESS NOTES BATCH PRINTER: WARD LASERJET 4SI
```

☞ **NOTE:**   Patch TIU*1*45 corrected problems related to printing progress notes: as a result, the value of TIUDIV should be defined as the IEN of an entry in the TIU DIVISION PRINT PARAMETERS file (#8925.94).

Patch TIU*1*20

Patch 20 offers enhancements to allow the printing of chart copies (where permitted) from the review screen (e.g., the *All my unsigned documents* option), and to specify a single printer when multiple notes are signed consecutively from the review screen. It also adds two new document parameters to conditionally require a YES or NO response to the Classification questions for exposure to AO, IR, or EC, as they apply, and to ask for encounter data on ALL Outpatient visits (scheduled as well as stand-alone). It adds action type protocols to allow the entry/editing of encounter data on demand, from the clinician's review and browse screens. It eliminates a DEVICE NOT OPEN error when the user exits, rather than printing upon signature, and finally, it allows for the removal of additional signers, independent of the user's file access.

Following successful installation of this patch, you may wish to modify the two new document parameters FORCE RESPONSE ON SC and ASK DX/CPT ON ALL OP VISITS, for the PROGRESS NOTES CLASS. To make the changes, use the TIU DOCUMENT PARAMETER EDIT option as shown below:

```
Select TIU Parameters Menu Option: TIU DOCUMENT PARAMETER EDIT  Document
Parameter Edit action
Document Parameter Edit
First edit Institution-wide parameters:

Select DOCUMENT DEFINITION: PROGRESS NOTES           CLASS
         ...OK? Yes//  <Enter>  (Yes)

DOCUMENT DEFINITION: PROGRESS NOTES//  <Enter>
REQUIRE RELEASE: NO//  <Enter>
REQUIRE MAS VERIFICATION: NO//  <Enter>
REQUIRE AUTHOR TO SIGN: YES//  <Enter>
ROUTINE PRINT EVENT(S):  <Enter>
STAT PRINT EVENT(S):  <Enter>
MANUAL PRINT AFTER ENTRY: YES//  <Enter>
ALLOW CHART PRINT OUTSIDE MAS: YES// <Enter>
ALLOW >1 RECORDS PER VISIT: YES// <Enter>
ENABLE IRT INTERFACE: <Enter>
SUPPRESS DX/CPT ON NEW VISIT: <Enter>
FORCE RESPONSE ON SC: YES// ??
     This parameter determines whether the user will be forced to enter a
     Yes or No response when asked to specify the Service Connection
     Classification of a Veteran, when creating a standalone visit (i.e.,
     AO, IR, or EC).
     Choose from:
       1        YES
       0        NO
FORCE RESPONSE ON SC: YES// Y  YES
ASK DX/CPT ON ALL OP VISITS: YES// ??
     Please indicate whether the Diagnosis and Procedural questions should
     be asked on Scheduled Appointments, in addition to Walk-ins and
     Telephone (i.e., Standalone) Encounters.
     Choose from:
       1        YES
       0        NO
ASK DX/CPT ON ALL OP VISITS: YES// Y  YES
EDITOR SET-UP CODE: <Enter>

If document is to be uploaded, specify Filing Alert Recipients:

Select FILING ERROR ALERT RECIPIENTS: CLERK,F.W.D.// <Enter>
```

```
Now enter the USER CLASSES for which cosignature will be required:

Select USERS REQUIRING COSIGNATURE: STUDENT// <Enter>

Now enter the DIVISIONAL parameters:

Select DIVISION: SALT LAKE CITY// <Enter>
  CHART COPY PRINTER: LASER// <Enter>
  STAT CHART COPY PRINTER: <Enter>
Select DIVISION: <Enter>
Press RETURN to continue... <Enter>
```

Patch TIU*1*23: EXEMPT PURGING OF PN ADDENDA

This patch resolves two problems with the application of the purge to TIU DOCUMENTS, by increasing the allowable number of days for retention to 7300 days (20 years), and by exempting addenda to Progress Notes from purge.

Following installation, you may wish to reset the Basic TIU Parameters, from the TIU IRM MAINTENANCE MENU OPTION, as shown in the example below:

```
Select TIU Maintenance Menu Option: TIU Parameters Menu

    1      Basic TIU Parameters
    2      Modify Upload Parameters
    3      Document Parameter Edit
    4      Progress Notes Batch Print Locations
    5      Division - Progress Notes Print Params

Select TIU Parameters Menu Option: 1  Basic TIU Parameters
First edit Division-wide parameters:

Select INSTITUTION: SALT LAKE CITY
ENABLE ELECTRONIC SIGNATURE: YES// <Enter>
ENABLE NOTIFICATIONS DATE: OCT 1,1996// <Enter>
GRACE PERIOD FOR SIGNATURE: 7// <Enter>
GRACE PERIOD FOR PURGE:??
     This is the number of days following transcription for which a
     document will be kept, prior to purge. Allowable range is from 90 to
     7300 days (20 years).

     NOTE: Progress Notes and their addenda are not subject to purge,
     regardless of this parameter. IF YOU WANT TO DISABLE PURGING
     ALTOGETHER, LEAVE THIS PARAMETER EMPTY (i.e., GRACE PERIOD FOR PURGE
     equal to NULL).
GRACE PERIOD FOR PURGE: 7300
CHARACTERS PER LINE: 60// <Enter>
OPTIMIZE LIST BUILDING FOR: performance// <Enter>
SUPPRESS REVIEW NOTES PROMPT: <Enter>
ENABLE CHART COPY PROMPT: YES// <Enter>
BLANK CHARACTER STRING: @@@// <Enter>


Press RETURN to continue... <Enter>

    1      Basic TIU Parameters
    2      Modify Upload Parameters
    3      Document Parameter Edit
    4      Progress Notes Batch Print Locations
    5      Division - Progress Notes Print Params
```

Patch TIU*1*29: FIX PROVIDER RECOGNITION PROBLEM

This patch resolves an issue identified by a number of sites, where providers entering notes were not being passed to PCE, because they had not been allocated to the ASU Class PROVIDER or any of its subclasses. It also provides a mechanism to assure that the PRIMARY PROVIDER is unambiguously identified when entering new standalone encounters through TIU.

To enter a default primary provider, follow the example below:

```
Select TIU Parameters Menu Option: 1  Basic TIU Parameters
First edit Division-wide parameters:

Select INSTITUTION: <Enter your institution>
ENABLE ELECTRONIC SIGNATURE: <YOUR SITE'S CURRENT VALUE>// <Enter>
ENABLE NOTIFICATIONS DATE: <YOUR SITE'S CURRENT VALUE>// <Enter>
GRACE PERIOD FOR SIGNATURE: <YOUR SITE'S CURRENT VALUE>// <Enter>
GRACE PERIOD FOR PURGE: <YOUR SITE'S CURRENT VALUE>
CHARACTERS PER LINE: <YOUR SITE'S CURRENT VALUE>// <Enter>
OPTIMIZE LIST BUILDING FOR: <YOUR SITE'S CURRENT VALUE>// <Enter>
SUPPRESS REVIEW NOTES PROMPT: <YOUR SITE'S CURRENT VALUE>// <Enter>
DEFAULT PRIMARY PROVIDER: ??
     This parameter determines whether and how TIU should default the Primary
     Provider prompt, when a standalone encounter is being documented.
     Choose from:
       0     NONE, DON'T PROMPT [The person entering the note will not be
                                 displayed the Primary Provider Provider
                                 prompt at all. There will be no chance to
                                 edit the primary provider at the time of
                                 the note being entered. The author, if
                                 appropriate, will be automatically past
                                 to PCE.  If the author is not a valid
                                 provider, no provider will pass to PCE.]
       1     DEFAULT, BY LOCATION [The person entering the note will be
                                 prompted for PRIMARY PROVIDER, with the
                                 default displayed being the default
                                 provider assigned to the location on
                                 the note. The default provider for a
                                 location can be established within the
                                 PIMS software.]
       2     AUTHOR (IF PROVIDER) [The person entering the note will be
                                 prompted for PRIMARY PROVIDER, with the
                                 default displayed being the author IF
                                 the author is a active provider. If the
                                 author is not a valid provider, then
                                 the prompt for primary provider is
                                 displayed with no default.  The person
                                 entering the note has the ability to
                                 enter a valid provider at this time.
DEFAULT PRIMARY PROVIDER: 1  DEFAULT, BY LOCATION
ENABLE CHART COPY PROMPT: <YOUR SITE'S CURRENT VALUE>// <Enter>
BLANK CHARACTER STRING: <YOUR SITE'S CURRENT VALUE>// <Enter>

Press RETURN to continue... <Enter>
```

Patch TIU*1*128: INCORRECT PATIENT ON UPLOAD

This patch corrects TIU documentation for uploading Operative Reports, and warns against using field numbers in upload setup for ANY documents where field numbers are not specified in TIU upload documentation. Also, sites that upload Operative Reports are reminded that transcribed CASE NUMBERS *must* be accurate.

Patch TIU*1*129: UPLOADING OP REPORTS TO SURGERY: IMPROVE RELIABILITY

This patch introduces a check of the case number during upload. If information on the transcribed case number does not match the patient social security number and operation date information, an error is generated along with an alert. You may then edit the transcribed information before the note gets filed.

This patch may be used as an example for checks for other documents. If your facility uploads document into files other than the TIU Document File (#8925) or the Surgery File (#130), your site needs to write custom edits using TIU*1*129 as an example.

Uploading Surgery Reports into the Surgery File

Operative Reports are uploaded into the Surgery File (#130) for the Surgery Package. Setup of other reports for storage in other non-TIU files would be similar and subject to similar notes and warnings.

To set up this functionality in TIU, use VA FileMan, along with the TIUFA SORT DDEFS MGR option to set up OPERATIVE REPORTS for the upload utility:

Uploading Surgery Reports into the Surgery File, cont'd

1. First, use the VA FileMan Utility - Edit File option to add TIU as an APPLICATION GROUP to the SURGERY file (#130). This will allow the SURGERY file to pass the screen on the TARGET FILE field in file 8925.1:

```
> D P^DII

VA FileMan 21.0

Select OPTION: UTILITY FUNCTIONS
Select UTILITY OPTION: EDIT FILE

MODIFY WHAT FILE: PROTOCOL// 130  SURGERY    (2 entries)
NAME: SURGERY// <Enter>
DESCRIPTION: <Enter>
Each entry in the SURGERY file contains information regarding a surgery
case made up of an operative procedure, or multiple operative procedures
for a patient. The file includes the information necessary for creating
the Nurses' Intraoperative Report, Operation Report, and Anesthesia Report

  Edit? NO// <Enter>
Select APPLICATION GROUP: TIU
 Are you adding 'TIU' as a new APPLICATION GROUP (the 1ST for this FILE)? Y
  (Yes)
Select APPLICATION GROUP: <Enter>
DEVELOPER: <Enter>

Select UTILITY OPTION: <Enter>

Select OPTION: <Enter>
> h
```

Uploading Surgery Reports into the Surgery File, cont'd

2. Next, use the TIUFA SORT DDEFS MGR option to create a new document definition for OPERATIVE REPORTS:

☞   **Note:**   The Sort Option is used rather than the Create Document Definitions option because the new OPERATIVE REPORT title has to be an *orphan title* and is not created as part of the Document Definition hierarchy. E. g., it is not under class Progress Notes.

```
    1       TIU Parameters Menu ...
    2       Document Definitions (Manager) ...
    3       User Class Management ...

Select TIU Maintenance Menu Option: 2  Document Definitions (Manager)

                --- Manager Document Definition Menu ---

    1       Edit Document Definitions
    2       Sort Document Definitions
    3       Create Document Definitions
    4       Create Objects

Select Document Definitions (Manager) Option:  Sort Document Definitions
Select Attribute: (T/O/S/U/P/A): Owner// T    Type
Select TYPE: (CL/DC/TL/CO/O/N): TL   TITLE
START WITH DOCMT DEF: FIRST// <Enter>........................
```

```
Sort by TYPE                       Jan 23, 1997 10:00:22       Page:  1 of    1
                            Entries of Type TITLE
Name                                                                    Type
1       ADDENDUM                                                        TL
2       ADMISSION ASSESSMENT                                            TL
3       ADVANCE DIRECTIVE                                               TL
4       ADVERSE REACTION/ALLERGY                                        TL
5       CLINICAL WARNING                                                TL
6       CRISIS                                                          TL
7       CRISIS NOTE                                                     TL
8       DISCHARGE SUMMARY                                               TL
9       FINAL DISCHARGE NOTE                                            TL
10      GENERAL NOTE                                                    TL
11      SOAP - GENERAL NOTE                                             TL


        ? Help   > Scroll Right    PS/PL Print Screen/List              >>>
    Find                  Boilerplate Text          Name/Owner/PrintName...
    Change View...        Detailed Display/Edit     Delete
    Create                Status...                 Copy
Select Action: Quit// CR   Create
```

```
Enter Document Definition Name to add as New Entry: OPERATIVE REPORT
TYPE: (CL/DC/TL/CO/O): TL   TITLE
CLASS OWNER: CLPAC   CLINICAL COORDINATOR ──── Delete the Class Owner if you
STATUS: (I): INACTIVE// <Enter>                  want a Personal Owner

 Entry added
```

Uploading Surgery Reports into the Surgery File, cont'd

```
Sort by TYPE                   Jan 23, 1997 10:03:48      Page:  1 of   1
                              Entries of Type TITLE
Name                                                                   Type
1      ADDENDUM                                                          TL
2      ADMISSION ASSESSMENT                                              TL
3      ADVANCE DIRECTIVE                                                 TL
4      ADVERSE REACTION/ALLERGY                                          TL
5      CLINICAL WARNING                                                  TL
6      CRISIS                                                            TL
7      CRISIS NOTE                                                       TL
8      DISCHARGE SUMMARY                                                 TL
9      FINAL DISCHARGE NOTE                                              TL
10     GENERAL NOTE                                                      TL
11     OPERATIVE REPORT                                                  TL
12     SOAP - GENERAL NOTE                                               TL


      ? Help    > Scroll Right   PS/PL Print Screen/List           >>>
    Find                  Boilerplate Text        Name/Owner/PrintName...
    Change View...        Detailed Display/Edit   Delete
    Create                Status...               Copy
Select Action: Quit//
```

3. Now that we have created an orphan OPERATIVE REPORT title, we use option MODIFY UPLOAD PARAMETERS to set upload parameters and captions for the new title:

```
Select TIU Parameters Menu Option: ?

   1       Basic TIU Parameters
   2       Modify Upload Parameters
   3       Document Parameter Edit
   4       Progress Notes Batch Print Locations
   5       Division - Progress Notes Print Params

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select TIU Parameters Menu Option: 2  Modify Upload Parameters
First edit Institution-wide upload parameters:

Select INSTITUTION:  SALT LAKE CITY HCS
ASCII UPLOAD SOURCE: remote computer// <Enter>
UPLOAD PROTOCOL: KERMIT// <Enter>
UPLOAD HEADER FORMAT: captioned// <Enter>
RECORD HEADER SIGNAL: $HDR// <Enter>
BEGIN REPORT TEXT SIGNAL: $TXT// <Enter>
RUN UPLOAD FILER IN FOREGROUND: YES//<Enter>

Now Select upload error alert recipients:

Select ALERT RECIPIENT: SCRIPTION,BERTRAND// <Enter>
Now edit the DOCUMENT DEFINITION file:
DOCUMENT DEFINITION: OPERATIVE REPORT        TITLE
ABBREVIATION: OPR
LAYGO ALLOWED: NO
UPLOAD TARGET FILE: SURGERY
Select TARGET TEXT FIELD: SURGEON'S DICTATION
```

Be sure to set this to NO so that the upload process does not create new entries in the SURGERY FILE.

Uploading Surgery Reports into the Surgery File, cont'd

The new LOOKUP METHOD in routine TIUPUTSX compares the transcribed SSN and the transcribed Operation Date with the SURGERY record corresponding to the transcribed CASE NUMBER. If there is a discrepancy, the Lookup aborts the attempt to file the report and instead, generates a filing error alert.

The routine also introduces Filing Error Resolution Code. This code is invoked when a user attempts to resolve a file error. It permits the user to select and view the correct SURGERY record to upload the transcribed report into. It then requests the user to appropriately correct the report and refile it.

```
UPLOAD LOOK-UP METHOD:?
     Please enter the MUMPS code to be executed for record location.
UPLOAD LOOK-UP METHOD:??
       Sometimes when an entry is uploaded into the target file, a new entry is
       created for it.  However, in other cases such as for Operative Reports,
       or
       for an addendum, the file entry already exists and must be looked-up and
       edited.

       Look-Up Method is the MUMPS code invoked to perform such a look-up on
       the target file.  If a look-up is necessary and this field is blank, a
       regular DIC lookup is performed.  If the regular DIC lookup is not
       sufficient to locate the appropriate entry, this field should contain the
       lookup.  It should expect any look-up special variables named in the header
       fields as input variables, and should return the variable Y in
       DIC-compatible form at (i.e., IEN^EXTERNAL VALUE[^1]).
UPLOAD LOOK-UP METHOD: D LOOKUP^TIUPUTSX
UPLOAD POST-FILING CODE: <Enter>
UPLOAD FILING ERROR CODE: ?
     This is Standard MUMPS code.
UPLOAD FILING ERROR CODE: ??
       This MUMPS-type field specifies the code to be executed when the user
       attempts to resolve a filing error.  Filing Errors may be resolved
       either by responding to a Filing Error Alert or through the option to
       Review Upload Events.  Typically, the code will offer the user an
       opportunity to look up online information necessary to resolve the error
       (e.g.,  demographic, or case-related information).
UPLOAD FILING ERROR CODE: D FIX^TIUPUTSX
Select CAPTION: PATIENT NAME
  CAPTION: PATIENT NAME// <Enter>
  ITEM NAME: PT NAME
  FIELD NUMBER: <Enter>
  LOOKUP LOCAL VARIABLE NAME: <Enter>
  EXAMPLE ENTRY: DOE,JOHN B.
  CLINICIAN MUST DICTATE: YES
  REQUIRED FIELD?: NO
Select CAPTION: CASE NUMBER
  CAPTION: CASE NUMBER// <Enter>
  ITEM NAME: CASE #
  FIELD NUMBER: .001
  LOOKUP LOCAL VARIABLE NAME: TIUSRCN
  EXAMPLE ENTRY: 12045
  CLINICIAN MUST DICTATE: YES
  REQUIRED FIELD?: YES
```

```
Select CAPTION: PATIENT SSN
  CAPTION: PATIENT SSN// <Enter>
  ITEM NAME: PT SSN
  FIELD NUMBER: 0
  LOOKUP LOCAL VARIABLE NAME: TIUSSN
  EXAMPLE ENTRY: 555-12-3445
  CLINICIAN MUST DICTATE: YES
  REQUIRED FIELD?: YES
Select CAPTION: OPERATION DATE
  CAPTION: OPERATION DATE// <Enter>
  ITEM NAME: OPERATION DATE
  FIELD NUMBER: 0
  LOOKUP LOCAL VARIABLE NAME: TIUODT
  EXAMPLE ENTRY: 5/27/2001
  CLINICIAN MUST DICTATE: YES
  REQUIRED FIELD?: YES
Select CAPTION:

The header for the OPERATIVE REPORT TITLE is now defined as:

$HDR:                              OPERATIVE REPORT
CASE NUMBER:                       12045
PATIENT SSN:                       555-12-3445
OPERATION DATE:                    5/27/2001
PATIENT NAME:                      DOE,JOHN B.
$TXT
  OPERATIVE REPORT Text
$EOM

*** File should be ASCII with width no greater than 80 columns.
*** Use "@@@" for "BLANKS" (word or phrase in dictation that isn't understood).

DOCUMENT DEFINITION:
```

Note 0 (zero) field number.

This new setup includes field numbers of 0 (zero) for captions OPERATION DATE, and PATIENT SSN. In the future, we will patch this so as not to need field numbers here. At the moment, however, code quits if we do not have *something* here. We used 0 (zero) because we do *not* want transcribed Operation Date or SSN filed in the Surgery file. These two captions are used solely to help cross-check the correct Surgery record.

☞ **Note:** Since the upload header definition has changed, transcribed files must change accordingly. Transcribed caption names must exactly match those in the header definition. For example, the caption SURGERY DATE/TIME must now read OPERATION DATE. The full patient SSN must be transcribed. Time (as well as date) may be included for OPERATION DATE if preferred, but time is not used in determining the correct surgery record, even if time is included.

Using the Upload Process for Other Reports

Sites using TIU routines to upload documents other than Operative Reports into files other than the TIU DOCUMENT file (# 8925) are warned that the need for custom lookup methods extends beyond Operative Reports. All such reports must have their own Lookup Method to perform cross-checks on transcribed data. Relying on generic TIU upload code to look up and correct the target record on the basis of a single piece of transcribed data *is not adequate*: A single error in dictation or transcription of header data can result in reports being filed in the wrong record.

If sites upload documents other than Operative Reports into non-TIU files, they must write their own Lookup Method for the report they upload. Sites may wish to use routine TIUPUTSX as a model to follow. Lookup Methods must be tested prior to use to make sure that they adequately deal with potential user errors in dictated and/or transcribed data. They should also deal with the possibility of sites putting field numbers on captions which should not have field numbers in upload header definitions. Here again, help is offered in routine TIUPUTSX.

Routine TIUPUTSX can also be used as a model to follow when writing Filing Error Resolution Code. Custom Filing Error Resolution Code is more a matter of convenience than of patient safety. If no Filing Error Resolution Code is present for a particular type of report, then generic TIU upload code invites the alert recipient to correct the temporary record and then attempt to re-upload it. However, the generic code does not offer any additional information which might help the user correct the record appropriately. In contrast, routine TIUPUTSX *does* offer such help.

Routine TIUPUTSX takes the simplest approach possible while still offering the user help; the user is still expected to correct the temporary transcription record, rather than having the software do the correction automatically and proceeding automatically to file the record, as is done for Discharge Summaries, for example.

If sites wish to bypass the need for the filing alert recipient to edit the temporary record once they have identified the correct target record, sites may use routine TIUPUTA as a model. Routine TIUPUTA contains Filing Error Resolution Code for uploading C&P Exams into the 2507 Exam file (# 396.4), and takes a more sophisticated approach.

DOCUMENT DEFINITION SETUP

The Document Definition Hierarchy provides the building blocks for TIU. As a kind of database or document management system, it is the structure that defines the characteristics of the actual progress notes, discharge summaries, consults, etc. This database structure enables documents (Titles) to share or inherit characteristics of the higher levels, Class and Document Class, such as signature requirements and print characteristics.

Document Definition Categories and Definitions

Name	Description
Class	A group of groups which may contain one or more CLASSES or DOCUMENT CLASSES. TIU exports a root Class, Clinical Documents, with the sub-classes Progress Notes and Discharge Summary.
Document Class	**A grouping which contains TITLES. Examples of Document Classes are: Medical Notes, Nursing Notes, Surgery Notes,**
Title	**A single entity at the lowest level. Titles define the actual Progress Notes or Discharge Summaries that you write (e.g., Endocrinology Notes, OPC/Psychology, Primary Care Notes, Dr. Jones' Discharge Summaries, etc.).**
Boilerplate Text	A kind of template for common types of documents, which may be composed of either boilerplate text, predefined Objects, or a combination of the two, to allow quick creation of notes.
Component	An individually stored block of text that is predefined for a specific purpose, such as SOAP components (Subjective, Objective, Assessment, Plan).
Object	A pre-defined placeholder that allows patient-specific text to be inserted into a document when a user selects a TIU document, such as PATIENT AGE.
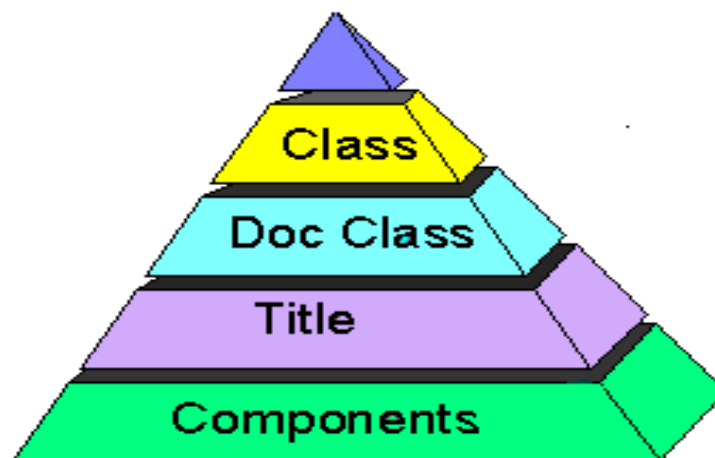
Create your TIU Document Class/Title structure

An important feature of TIU is its improved searching and retrieving capabilities across documents. This is done by a meaningful grouping of Titles to facilitate sorting.

A new grouping in TIU, *Document Class*, groups Titles according to Service, product line, or whatever grouping system your site prefers.

Important   Sit down with hospital staff from relevant services or product lines to create a paper list of these Document Classes before you enter them with this option.

Exported Document Classes
The CWAD Titles have already been established as individual Document Classes in order for the CWAD alert system to work. The corresponding Titles are automatically placed under the appropriate Document Class.

The Historical Titles Document Class has also been provided. Most sites have many thousands of General Notes as well as SOAP - General Notes entered in their databases. These titles will not serve you well in TIU, as they don't contribute to meaningful sorting. The Titles conversion routine automatically converts these Titles to the Historical Titles Document Class and make them inactive. All data is still fully accessible; you just won't have numerous notes sorted in no particular category.

Addiction Severity Index (ASI), a patch from the Mental Health Package, automatically generates a simple, electronically signed Progress Note. ASI is exported as a Document Class and a Title.

Example of a Document Definition Hierarchy:
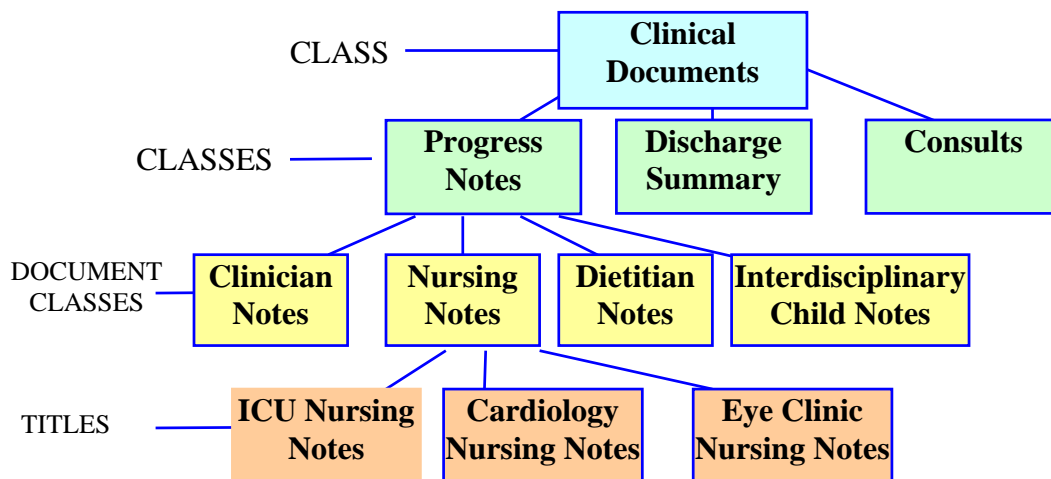
Fine-tuning your initial Document Definition Hierarchy

After installing and converting Progress Notes, you'll probably need to do some fine-tuning of the Document Hierarchy before you create any new Document Classes, Titles, or Boilerplate Text. Look at the report of Titles produced by the option, *TITLEs Sorted by Document Class- Report,* on the TIU Maintenance Menu, before proceeding.

Inactivating a Title

When the Titles are converted from Progress Notes File 121.2 to TIU 8925, titles that were inactive are still inactive in TIU; active titles are converted as active. To be able to fine-tune Titles (change any parameters or characteristics) you must "inactivate" them. Do this through the option *Edit Document Definition.*

Example: Inactivating a Title

When you use *Edit Document Definition,* you can "drill down" to the Title by using the action Expand/Collapse or you can use Jump to Document Def to "jump" directly to the Title you want.

1. Select *Edit Document Definitions* from your Document Definition Menu.

2. Select the action Expand/Collapse and then entry #4, Progress Notes.

☞**Shortcut**: At any "Select Action" prompt, you can type the action abbreviation, then the = sign and the entry number (e.g., E=4).

```
Edit Document Definitions      Jan 28, 1997 10:46:03     Page:  1 of   1
                              BASICS
      Name                                                          Type
1     CLINICAL DOCUMENTS                                            CL
2       +ADDENDUM                                                   DC
3       +DISCHARGE SUMMARY                                          CL
4       +PROGRESS NOTES                                             CL



          ?Help    >ScrollRight   PS/PL PrintScrn/List   +/-            >>>
    Expand/Collapse        Detailed Display/Edit    Items:Seq Mnem MenuTxt
    Jump to Document Def   Status...                Delete
    Boilerplate Text       Name/Owner/PrintName...  Copy
Select Action: Quit// E=4
```

Inactivating a Title, cont'd

3. Select E again, then the entry 10.

```
Edit Document Definitions      Jan 28, 1997 10:53:52     Page: 1 of   2
                                  BASICS
+     Name                                                         Type
5           ADVANCE DIRECTIVE                                        DC
6           ADVERSE REACTION/ALLERGY                                 DC
7           CRISIS NOTE                                              DC
8           CLINICAL WARNING                                         DC
9           HISTORICAL TITLES                                        DC
10          NURSING NOTES
                                            DC
    ? Help      > Scroll Right     PS/PL Print Screen/List     >>>
  Expand/Collapse        Detailed Display/Edit    Items:Seq Mnem MenuTxt
  Jump to Document Def   Status...                Delete
  Boilerplate Text       Name/Owner/PrintName...  Copy
Select Action: Next Screen// E=10    Expand/Collapse
```

4. Select the Status action, enter Inactive at the Status prompt, then enter 11 at the Select Entry prompt..

```
Edit Document Definitions      Jan 28, 1997 10:53:52    Page:   1 of   2
                                  BASICS
+     Name                                                         Type
10          NURSING NOTES                                           DC
11            NURSING-PATIENT EDUCATION NOTE                        TL



        ? Help      > Scroll Right      PS/PL Print Screen/List     >>>
  Expand/Collapse        Detailed Display/Edit    Items:Seq Mnem MenuTxt
  Jump to Document Def   Status...                Delete
  Boilerplate Text       Name/Owner/PrintName... Copy
```

```
Select Action: Next Screen// ST Status
Select STATUS: (A/I/T): ?
Documents can be entered on ACTIVE Titles.  Only the Owner can enter a
document on TEST Titles.  Only INACTIVE Document Definitions can be
edited.
Choose from:   ACTIVE    INACTIVE    TEST
Select STATUS: (A/I/T): I  INACTIVE
Selecting Entries for Status INACTIVE.  Please select ONE entry. You will
be prompted for another.
at the same time.
Select Entry: (10-11): 11
Entry Inactivated!......
```

5. Once a Title is inactivated, you can edit the search title (Name), the abbreviation (acronym), the print Title, the boilerplate, and the owner (personal or User Class).

❖ **NOTE:**   The Title must be re-activated for a clinician or others to write a Progress Note using this Title.

Creating and Editing Titles

A basic set of Document Definitions is exported with the TIU package. Patch #44 helps you begin to set up your Document hierarchy by converting the Progress Notes structure to TIU files. With the exported set of Titles, you have an adequate base for your users to begin writing notes and summaries. To refine and adapt the package to your site's needs, follow the instructions in this section.

Document Definition Options

Option Text	Option Name	Description
Edit Document Definitions	TIUFH EDIT DDEFS	This option lets you view and edit entries. Entries are presented in hierarchy order. Items of an entry are in sequence order, or if they have no sequence, in alphabetic order by menu text, and are indented below the entry. Since Objects don't belong to the hierarchy, they can't be viewed or edited using the Edit Options.
Create Document Definitions	TIUFC CREATE DDEFS	This option lets you create new entries of any type (Class, Document Class, Title, Component) except Object, placing them where they belong in the hierarchy. Although entries can be created using the Edit and Sort options, the Create option streamlines the process. This option present entries in hierarchy order, traversing ONE line of descent, starting with Clinical Documents at the top. The Create option permits you to view, edit, and create entries, but only from within the current line of descent. The Create Option doesn't let you copy an entry.
Sort Document Definitions	TIUFA SORT DDEFS	This option lets you select sort criteria. It then displays selected entries in alphabetic order by Name, rather than in hierarchy order. Depending on sort criteria, entries can include Objects. The Sort option lets you view and edit entries.
Create Objects	TIUFJ CREATE OBJECTS MGR	This option lets you create new objects or edit existing objects. First you select Start With and Go To values, and the existing Objects within those values are displayed in alphabetical order.
View Objects	TIUFJ VIEW OBJECTS CLIN	This option on the Clinician Document Definition menu lets you view objects by a selected date range, in alphabetical order.

Creating new Document Classes and Titles

Title Conversion
All Titles converted to TIU are assigned to the Clinical Coordinator.
Titles that were active will be active in TIU. While editing, adding boilerplate, etc., an Active Title needs to be made Inactive. When you're ready to start using it, change the status to Active, using the Edit Status action in the *Edit Document Definitions* option.

Hierarchy Levels
To create Document Classes or Titles, you need to move to the level of the hierarchy where that document class or title belongs.

> *Summary of creating a new Document Class*
> - Select Next Level.
> - Select the number on the screen for Progress Notes class.
> - You then see only that level of the hierarchy on the screen, with Progress Notes bolded.
> - Select the action Class/Document Class to Create a Document Class.

> *To create a Title:*
> - Select Next Level plus the number of the new Document Class you created.
> - The screen shows just that level of the hierarchy with the Document Class Name bolded.
> - Select the action Title to Create a Title.

See the examples on the following pages for more detailed instructions.

Example 1: Using the *Create Document Definitions* option

In this example, we create a Progress Note Document Class called Nursing Notes, then a Title called Nursing Patient Education Notes.

1. Select *Document Definitions* from your menu.

2. Select *Create Document Definitions*. A screen appears, similar to the one on the following page .

☞ **NOTE:** The Class CLINICAL DOCUMENTS is bolded to show that you're at that level of the hierarchy.

```
Create Document Definitions    Oct 30, 1996 15:41:35   Page:   1 of   1
                              BASICS

        Name                                                       Type
1       CLINICAL DOCUMENTS                                          CL
2          ADDENDUM                                                 DC
3          DISCHARGE SUMMARY                                        CL
4          PROGRESS NOTES                                           CL


          New Users. Please enter '?NEW' for Help>
   Class/DocumentClass        Next Level             Detailed Display/Edit
   (Title)                    Restart                Status...
   (Component)                Boilerplate Text       Delete
Select Action: Next Level// ?NEW
```

 Help for new users:
   The Create Option shows the Hierarchy, with CLINICAL DOCUMENTS at the top.
   When the option begins, Clinical Documents is bolded with its current items indented
   below it. You can create additional items under Clinical Documents if you so choose.

   If you wish to create items under a LOWER entry, you must go down the hierarchy
   successive levels until the proper entry is bolded and THEN create your items under the
   bolded entry.

   To go down a level, select action NEXT LEVEL and then select an entry.

   To create an entry, select Class/DocumentClass, Title, or Component. Only one of these
   actions is selectable at a given time.(Actions enclosed in parentheses are not selectable.)

    Enter ? for Help
    Enter ?? for detailed help on actions including PRINTING
    Enter ??? for detailed help on display
   Press RETURN to continue or '^' or "^^" to exit:

Example 1: Create Document Definitions, cont'd

3. Press Enter to accept the default of Next Level, so that you can create the Nursing Notes as a Document Class under Progress Notes.

```
Create Document Definitions    Oct 30, 1996 15:41:35    Page:   1 of    1
                               BASICS

         Name                                                        Type
1        CLINICAL DOCUMENTS                                          CL
2            ADDENDUM                                                DC
3            DISCHARGE SUMMARY                                       DC
4            PROGRESS NOTES                                          CL


         New Users. Please enter '?NEW' for Help>
    Class/DocumentClass       Next Level            Detailed Display/Edit
    (Title)                   Restart               Status...
    (Component)               Boilerplate Text      Delete
Select Action: Next Level// <Enter>   Next Level
```

Create Document Definitions Action Descriptions

Actions are not selectable when they are enclosed in parentheses.

Class/DocumentClass
This action is selectable only when the highlighted entry is a Class. It lets you create a new Class or Document Class under the bolded entry.

Title
Create Title is selectable only when the bolded entry is a Document Class. This action lets you create a new Title under the bolded entry.

Component
This action is selectable only when the bolded entry is a Title. It lets you create a new Component under the bolded entry. A Title must be Inactive before Components can be created under it. Subcomponents are created by selecting the action Detailed Display at the parent Component, and Editing its Items. You can't create Objects in *Create Document Definitions.* Use the option *Create Objects* or *Sort Document Definitions.*

Next Level
Your current position in the Hierarchy is marked by the bolded entry. This action lets you navigate down the Hierarchy by selecting an item under the highlighted entry.

❖ **NOTE:**   Next Level differs from Expand/Collapse in that Next Level changes your position in the hierarchy and limits future expansion to items of that entry.

Restart
This action takes you back to the original display, with Clinical Documents bolded as the current position in the hierarchy.

Example 1: Create Document Definitions action descriptions, cont'd

Boilerplate Text
Applies to Titles and Components only. This action lets you display and edit the boilerplate text of an entry. If the entry is a Title, it also displays the boilerplate text of any Components. If you have the Manager menu, you don't have to own the entry to edit its boilerplate text.

Detailed Display/Edit
Detailed Display lets you view and edit (if appropriate) details about the entry you select. This action differs from the Items action in that Detailed Display permits edit of all aspects of the entry, including Items, but Items looks at the entry ONLY as an Item under its parent and permits edit of Item characteristics ONLY. Editing is limited if the entry is National. Shared Components can be viewed through the *Edit Document Definitions* option but can be edited only via the *Sort* option.

Status
♦   Select Status Inactive, Test, or Active.
♦   Select an entry. (If selected Status is Active, you can select multiple entries.)
♦   If the entry is a Class or Document Class, Status is changed to the selected Status (Inactive, Test, or Active). If the selected Status is Inactive, descendants are also Inactivated.
♦   If the entry is a Title, the Status is changed and Component Statuses are automatically changed to the same Status. Exception: Shared Components don't have a Status and are not changed.
♦   To change the status of an Object, use the action Basics under Detailed Display, since Detailed Display shows Titles with the object embedded.

Delete
Deletes the entry from the TIU Document Definition file 8925.1.
An entry will first be deleted as an item wherever it is used as an item.

Can delete if:	**Can't delete if:**
Inactive status	Active Status
Owner	In Use by documents.
	National entry
	Shared Component
	Pointed to by Business Rule

If the entry is used or pointed to by an entry in another file (for example if an entry has a Business Rule which references it), it is the user's responsibility to delete the entry which points to it (for example, the Business Rule) before deleting the entry.

Object Delete

Example 1: Create Document Definition, cont'd

Objects can be deleted only from the Detailed Display of the Object. This action deletes the Object from the file. Objects can only be deleted by the owner and only after deactivation. Object can't be deleted if they are embedded in Boilerplate Text of any Titles.

4. Select the number of the Clinical Document you want to place your Document Class under.

```
Select CLINICAL DOCUMENT Item (Line 2-4): 4
```

5. The following screen appears, displaying only Progress Notes Document Classes. **Note that Progress Notes is bolded, indicating that you are working at that level in the hierarchy.** Select Class/DocumentClass to create a new document class.

```
Create Document Definitions       Oct 30, 1996 15:41:35    Page: 1 of  1
                              BASICS


       Name                                                       Type
1      CLINICAL DOCUMENTS                                         CL
2        PROGRESS NOTES                                           CL
3          ADVANCE DIRECTIVE                                      DC
4          ADVERSE REACTION/ALLERGY                               DC
5          CRISIS NOTE                                            DC
6          CLINICAL WARNING                                       DC
7          HISTORICAL TITLES                                      DC
         ? Help     > Scroll Right     PS/PL Print Screen/List  +/-   >>>
   Class/DocumentClass       Next Level            Detailed Display/Edit
   (Title)                   Restart               Status...
   (Component)               Boilerplate Text      Delete
Select Action: Next Level// Cl  Class/DocumentClass
```

6. Answer the following prompts:

```
Enter the Name of a new PROGRESS NOTES: NURSING NOTES
TYPE: (CL/DC): DC   DOCUMENT CLASS
STATUS: (A/I): INACTIVE// <Enter>
CLASS OWNER: CLINICAL COORDINATOR  Replace <Enter>
SEQUENCE: 6
MENU TEXT: Nursing Notes// <Enter>
Entry Created
If you wish, you may enter another PROGRESS NOTES: <Enter>
```

Example 1: Create Document Definition, cont'd

Explanations for the prompts above
CLASS OWNER
- A Class Owner is a User Class from the USR CLASS file (in ASU) whose members may edit the entry. An entry may have a Personal OR a Class Owner, but not both. The program doesn't prompt for Class Owner if the entry has a Personal Owner.
- If the document is owned by a Class rather than by a Person, enter the name of the User Class whose members may edit the entry. If it's owned by a Person, you won't be prompted for Class Owner. If you want to change a Class Owner to a Personal Owner, delete the Class Owner by entering '@' at the Class Owner prompt. When Titles were converted from the old Progress Notes package, they were all given to the Class Owner, Clinical Coordinator. To enter a different Class Owner, enter the appropriate class after the //'s. If there are no //'s and the Replace...with editor is being used, enter ... to replace the whole class and then enter the appropriate class.
- Document Definition Ownership has nothing to do with who can USE the entry to enter a document. It determines responsibility for the Document Definition itself.
- An entry can be edited by its owner. (The Manager menu permits override of ownership so that ownership can be assigned to a clinician (anyone who has the Clinician Menu) who can then fill in boilerplate text, while the manager can still edit the entry, since there are many fields the clinician does not have access to.)

STATUS (A/I/T)
- **Status provides a way of making Document Definitions "offline" to documents. Document Definitions need to be "offline" if they are new and not ready for use, if they are being edited, or if they are retired from further use.**
- **Documents can only be entered on ACTIVE Titles.**
- **Only the Owner can enter a document on TEST Titles.**
- **Only INACTIVE Document Definitions can be edited.**

SEQUENCE
- **Sequence, if entered, determines an item's order under its parent. If items have no sequence, item order is alphabetic by Menu Text.**
- Sequence must be between .01 and 999.

MNEMONIC
- ♦ Mnemonic is a number or abbreviation to select Classes/Document Classes from a menu. Enter the Sequence number, or 1-4 letters, or nothing if you don't want mnemonics.
- ♦ Mnemonic is usually numeric with the same value as the Sequence.

Example 1: Create Document Definitions, cont'd

MENU TEXT
- Answer must be 1-20 characters in length.
- Can't start with "All" or a space.
- Menu Text is the name users will see for Classes and Document Classes when selecting them from a 3-column Menu. Document Definitions are selected from 3-column menus when viewing documents across many patients and when viewing many kinds of documents at the same time (e.g. Progress Notes and Discharge Summaries).
- The program automatically sets the Menu Text to the first 20 characters of the Item's Name when an entry is first added as an item.
- It doesn't update Menu Text if the item name is later changed, since this would overwrite what a site may have carefully set up.
- Menu Text can affect item order under a parent since order is alphabetic by Menu Text if items don't have sequence numbers.

7. The following screen appears. Only one item is listed, because there are no items (Titles) below it.

```
Create Document Definitions   Oct 30, 1996 15:41:35    Page:   1 of  1
                             BASICS

+      Name                                                         Type
4      NURSING NOTES                                                 DC




? Help     > Scroll Right     PS/PL Print Screen/List  +/-    >>>
   Class/DocumentClass      Next Level            Detailed Display/Edit
   (Title)                  Restart               Status...
   (Component)              Boilerplate Text      Delete
Select Action: Next Level// <Enter>
```

Example 1: Create Document Definition, cont'd

8. Select Detailed Display/Edit to see the details of your new Document, and to add characteristics that you want to apply to all sub-documents (Document Classes or Titles) for this Document Class.

```
Detailed Display           Oct 30, 1996 15:41:35        Page: 1 of 2
                       Document Class NURSING NOTE
Basics            Note: Inherited Values preceded by *
            Name:   NURSING NOTE
     Abbreviation:
       Print Name:   NURSING NOTE
             Type:   DOCUMENT CLASS
              IFN:   1086
         National
         Standard:  NO
           Status:  INACTIVE
            Owner:  CLINICAL COORDINATOR
           In Use:  NO
Suppress Visit
        Selection:  NO


 Items
+          ? Help       +, - Next, Previous Screen    PS/PL
     Basics                   Technical Fields         Find
     Items: Seq Mnem MenuTxt  Upload                   Quit
     (Boilerplate Text)       Try
Select Action: Next Screen// <Enter>
```

```
Detailed Display           Oct 03, 1996 14:12:17       Page:  2 of   2
                       Document Class NURSING NOTE
+
Item                    IFN    Seq    Mnem  Menu Text
 NURSING NOTE           1087   RAN    4     Nursing Note

  Technical Fields      Note: Inherited Values preceded by *
        Entry Action:
         Exit Action:
       Edit Template: * [TIU ENTER/EDIT PROGRESS NOTE]
        Print Method: * D ENTRY^TIUPRPN
   Print Form Header: * Progress Notes
   Print Form Number: * Vice SF 509
         Print Group: * 2
Visit Linkage Method: * D ENPN^TIUVSIT(.TIU,.DFN,1)
   Validation Method: * S TIUASK=$$CHEKPN^TIULD(.TIU,.TIUBY)
Allow Custom Headers: * YES

+          ? Help       +, - Next, Previous Screen    PS/PL
     Basics                   Technical Fields         Find
     Items: Seq Mnem MenuTxt  Upload                   Quit
     (Boilerplate Text)       Try
Select Action: Quit//
```

Example 1: Create Document Definitions cont'd

9. As you can see, you can define the print methods, form headers, templates, and other characteristics that can apply to many documents (Titles) within a Class or Document Class.

10. Quit out of Detailed Display, select Next Level and item 8. You can now start adding Titles to the Document Class you just created.

```
Select Document Definitions Option: 3  Create Document Definitions.
```

```
Create Document Definitions    Oct 30, 1996 15:41:35    Page:   1 of  1
                              BASICS

        Name                                                      Type
1       CLINICAL DOCUMENTS                                         CL
2         PROGRESS NOTES                                           CL
3           ADVANCE DIRECTIVE                                      DC
4           ADVERSE REACTION/ALLERGY                               DC
5           CRISIS NOTE                                            DC
6           CLINICAL WARNING                                       DC
7           HISTORICAL TITLES                                      DC
8           NURSING NOTES                                          DC
? Help      > Scroll Right      PS/PL Print Screen/List  +/-     >>>
    Class/DocumentClass        Next Level            Detailed Display/Edit
    (Title)                    Restart               Status...
    (Component)                Boilerplate Text      Delete
Select Action: Next Level// <Enter>
 Select PROGRESS NOTES Item (Line 3-8): 8
```

11. When the next level is displayed, accept the default of Title.

```
Create Document Definitions    Oct 30, 1996 15:49:15    Page:  1 of  1
                              BASICS
+       Name                                                      Type
2         PROGRESS NOTES                                           CL
3           NURSING NOTES                                          DC


        ? Help      > Scroll Right      PS/PL Print Screen/List      >>>
    Class/DocumentClass        Next Level            Detailed Display/Edit
    (Title)                    Restart               Status...
    (Component)                Boilerplate Text      Delete
Select Action: Title// <Enter> Title
```

Example 1: Create Document Definitions cont'd

12. Answer the following prompts about the new Title.

```
 Enter the Name of a new NURSING NOTES: Nursing-Patient Education Note
CLASS OWNER: CLINICAL COORDINATOR   Replace
STATUS: (I): INACTIVE// <Enter>
SEQUENCE: 1
MENU TEXT: Nursing-pt Education   Replace <Enter>

 Entry Created

 If you wish, you may enter another NURSING NOTES: <Enter>
```

13. You can create another Title or edit the one you just created.

14. If you decide to create another Title, enter the name of the new Title at the prompt above and answer the other prompts, similarly to the example above.

15. If you don't create another Title and respond to the prompt with **<Enter>**, the screen re-displays, showing the new Title. At this point you can edit, delete, perform other actions, or quit.

```
Create Docmt Definitions      Oct 30, 1996 15:49:15   Page:   1 of    1
                                BASICS

+      Name                                                        Type
3          NURSING NOTES                                           DC
4             NURSING - PT EDUCATION NOTE                          TL




          ? Help      > Scroll Right      PS/PL Print Screen/List     >>>
   (Class/DocumentClass)    Next Level          Detailed Display/Edit
   Title                    Restart             Status...
   Component                Boilerplate Text    Delete
Select Action: Title//
```

Example 1: Create Document Definitions cont'd

16. If you scroll to the right (using the ">" symbol), you can see further
characteristics of your document (Title).

```
Create Document Definitions     Oct 30, 1996 15:49:15    Page: 1  of 1
                                 BASICS

+    Name                         Type    IFN  Natl  Status  Owner
4    NURSING - PT EDUCATION NOTE    TL     1087  No    I      jg




   <<<     ? Help      +, - Next, Previous Screen                    >>>
   (Class/DocumentClass)   Next Level            Detailed Display/Edit
   Title                   Restart               Status...
   Component               Boilerplate Text      Delete
Select Action: Title// >
```

17. Scrolling to the right again produces even more characteristics.

```
Create Document Definitions     Oct 01, 1996 11:26      Page: 1 of   1
                                 BASICS

+    Name                         Type  In Use  Boil    Print Name
4    NURSING - PATIENT EDUCATION NOTE   TL    No    No     NURSING-PT ED



   <<<     ? Help      +, - Next, Previous Screen                    >>>
   (Class/DocumentClass)   Next Level            Detailed Display/Edit
   Title                   Restart               Status...
   Component               Boilerplate Text      Delete
Select Action: Title// <Enter>
```

18. Create boilerplate text (or copy Boilerplate text from other Titles) to add to the
Title you have created. Use the Boilerplate Text action. See the next section,
"Creating Boilerplate Text and Objects," for examples.

☞ **NOTE:**   After you've created a Title and edited it to fit your needs, you need to
"activate" the Title. Use the action "Status" to do this.

Example 2: Using the *Edit Document Definitions* option

This option lets you view and edit entries. Entries are presented in hierarchy order.
Items of an entry are in sequence order, or if they have no sequence, in alphabetic
order by menu text, and are indented below the entry. In this example, we'll edit
some of the "Basics" of a Title. We'll add an abbreviation and change the class
owner to a personal owner.

1. Select *Edit Document Definitions* from your menu.

2. When the screen is displayed, select the action Expand/Collapse, then entry #4.

```
Edit Document Definitions      Jan 28, 1997 10:46:03    Page:   1 of   1
                              BASICS
        Name                                                    Type
1       CLINICAL DOCUMENTS                                      CL
2         +ADDENDUM                                             DC
3         +DISCHARGE SUMMARY                                    CL
4         +PROGRESS NOTES                                       CL

          ?Help    >ScrollRight   PS/PL PrintScrn/List   +/-          >>>
   Expand/Collapse      Detailed Display/Edit   Items: Seq Mnem MenuTxt
   Jump to Document Def  Status...              Delete
   Boilerplate Text      Name/Owner/PrintName... Copy/Move...
Select Action: Quit// E=4
```

3. Select Expand/Collapse again, then entry 10.

```
Edit Document Definitions      Jan 28, 1997 10:53:52    Page:   1 of   2
                              BASICS
+       Name                                                    Type
5           ADVANCE DIRECTIVE                                   DC
6           ADVERSE REACTION/ALLERGY                            DC
7           CRISIS NOTE                                         DC
8           CLINICAL WARNING                                    DC
9           HISTORICAL TITLES                                   DC
10          NURSING NOTES                                       DC
? Help      > Scroll Right    PS/PL Print Screen/List    >>>
   Expand/Collapse      Detailed Display/Edit   Items: Seq Mnem MenuTxt
   Jump to Document Def  Status...              Delete
   Boilerplate Text      Name/Owner/PrintName... Copy/Move...
Select Action: Next Screen//Ex=10   Exp/Collapse Entry
```

Example 1: Create Document Definitions, cont'd

```
Edit Document Definitions     Jan 28, 1997 10:53:52    Page:  1 of   2
                              BASICS
+      Name                                                      Type
10        NURSING NOTES                                          DC
11          NURSING-PATIENT EDUCATION NOTE                       TL


          ? Help     > Scroll Right     PS/PL Print Screen/List     >>>
    Expand/Collapse         Detailed Display/Edit   Items: Seq Mnem MenuTxt
    Jump to Document Def  Status...                Delete
    Boilerplate Text      Name/Owner/PrintName... Copy/Move...
Select Action: Next Screen//
```

Example 2: Edit Document Definitions, cont'd

4. We now show the Detailed Display/Edit screen, to edit characteristics of the Nursing-:Patient Education Note. Select Det for Detailed Display, then entry 11.

```
Edit Document Definitions     Jan 28, 1997 10:53:52     Page:   1  of    2
                              BASICS
+     Name                                                            Type
10         NURSING NOTES                                              DC
11           NURSING-PATIENT EDUCATION NOTE                           TL

          ? Help     > Scroll Right     PS/PL Print Screen/List     >>>
     Expand/Collapse        Detailed Display/Edit     Items: Seq Mnem MenuTxt
     Jump to Document Def  Status...                  Delete
     Boilerplate Text      Name/Owner/PrintName...    CopyMove...
Select Action: Next Screen// det=11    Detailed Display/Edit
```

5. The screen displays the basics and technical fields of the note,

```
Detailed Display                Jan 28, 1997 10:53:52     Page:   1 of    2
                       Title NURSING-PATIENT EDUCATION NOTE
Basics              Note: Inherited Values preceded by *
          Name:    NURSING-PATIENT EDUCATION NOTE
   Abbreviation:
    Print Name:   NURSING-PATIENT EDUCATION NOTE
          Type:    TITLE
           IFN:    1231
      National
      Standard:    NO
        Status:    INACTIVE
         Owner:
    Class Owner:   CLINICAL COORDINATOR
        In Use:    NO
    Additional
       Signers: * ALLOWED
  Suppress Visit
     Selection:  * NO
+          ? Help       +, - Next, Previous Screen
     Basics                   Technical Fields          Find
     Items: Seq Mnem MenuTxt  Upload                    Quit
     Boilerplate Text         Try
Select Action: Next Screen// <Enter>
```

Example 2: Edit Document Definitions, cont'd

```
Detailed Display            Jan 28, 1997 10:53:52      Page:  2 of    2
                     Title NURSING-PATIENT EDUCATION NOTE
Technical Fields      Note: Inherited Values preceded by *
        Entry Action:
         Exit Action:
       Edit Template: * [TIU Enter/EDIT PROGRESS NOTE]
       Print Method: * D ENTRY^TIUPRPN
   Print Form Header: * Progress Notes
   Print Form Number: * Vice SF 509
         Print Group: * 2
Visit Linkage Method: * D ENPN^TIUVSIT(.TIU,.DFN,1)
   Validation Method: * S TIUASK=$$CHEKPN^TIULD(.TIU,.TIUBY)
              ? Help       +, - Next, Previous Screen
     Basics                  Technical Fields          Find
     Items: Seq Mnem MenuTxt  Upload                    Quit
     Boilerplate Text         Try
Select Action: Quit// ba Basics
```

Edit Document Definitions Action Descriptions

Only actions unique to the Edit option are described here.

Actions are not selectable when they are enclosed in parentheses.

Expand/Collapse Entry

This action expands or collapses the selected entry to display entry items or to collapse the entry hierarchy. Entries preceded by + have items and can be expanded.

Jump To Document Def

This action applies to the *Edit Document Definitions* option only. Select any Document Definition in the Clinical Document Hierarchy and the action expands the display to include the selected entry. You can't jump to Orphans or Objects, since they don't belong to the hierarchy. You can't jump to Shared Components, since they may occur more than once in the hierarchy. This is a quick way to move down the hierarchy in one step.

Name/Owner/PrintName

This action is available only on the Edit Document Definitions screen. Allows you to edit Name, Owner, and Print Name.

Copy/Move

OVERVIEW
Copy/Move is a very powerful action and should be used with great care. It is accessible only through the Document Definitions (Manager) menu [TIUF DOCUMENT DEFINITION MGR]. Like other actions on the Manager menu, it disregards ownership. Users are expected to move only titles or documents for which they are responsible.

Under the action Copy/Move, you may choose MT to MOVE TITLE, MD to MOVE DOCUMENTS, C to COPY, or U to UPDATE DOCUMENTS:

- MT: A Title may be moved to a different Document Class when, for example, hospital services are reorganized. Documents defined by the title are then updated with the new PARENT DOCUMENT TYPE (field # .04).
- MD: ALL documents defined by a given title may be moved to another title, for example, when a little-used title is eliminated in favor of a broader title.
- C: Titles, components, and objects may be copied, for example, when jump-starting a new Document Definition by copying and then editing the copy. Title and component copies may be placed under the same parent as the original, placed under a new parent, or left as orphans.
- U: Documents defined by a particular title are updated with the correct PARENT DOCUMENT TYPE (field # .04).

Action Descriptions, cont'd

When Moving or Copying a title, be aware that changing positions in the hierarchy gives an entry NEW INHERITED behavior.Accordingly, some moves may not be appropriate. It is the user'sresponsibility to determine whether or not a given action is appropriate.

DETAILED DESCRIPTION
COPY:
The Copy action prompts for an entry to copy and a new entry name to copyinto. This name must be different from the name of the entry being copied.The action then creates a new entry with the chosen name and copies thefields in the Document Definition File 8925.1 into the new entry.

Certain fields require more information on exactly how they are copied:

EMPTY FIELDS - If the original has empty fields, they are copied empty, NOT as inherited.
STATUS FIELD - If the original has a Status of Active or Test, the entry may be copied, but the copy has a Status of Inactive.

NATIONAL STANDARD FIELD - If the original is National Standard, the entry may be copied, but the copy is not National Standard.

SHARED FIELD - If a component is Shared, it may be copied but the copy is not Shared. If the component has subcomponents, new nonshared subcomponents are created and added to the copy.

ITEMS FIELD - If the original entry has items, the action prompts for item names to copy into, creates NEW entries for the items, and adds the NEW items to the copy.

SHARED ITEMS - If a Nonshared entry has a Shared item, the action does NOT copy the Shared item but merely adds the Shared item to the copy.

TITLES and COMPONENTS can be copied from the Edit Option or the SortOption.

If an entry is copied under the Edit option, you are asked which parent to add the copy to, and the copy is added as an item to this parent. If no parent is selected, the copy is left as an orphan.

Copying an Entry to a New Parent:
- If you are copying a title, then the parent to which the copy is added must be in the hierarchy and must be a document class.

- If you are copying a component, then the parent to which the copy is added must be in the hierarchy and must be a title or a component. The parent must be inactive and may not be National Standard or Shared.

Action Descriptions, cont'd

- If an entry is copied under the Sort option (not the Edit option), then the title or component copies are left as orphans.

- Although orphan titles or components will not appear in the Document Definition hierarchy, they can be still be added to a parent through both the Sort and the Edit options by selecting the action Items for the parent, then the action Add/Create, and then the orphan item.

Checking Copies:
Copy titles which have been given a new parent should be thoroughly checked before they are activated since their inherited behavior may have changed.

The check should include Document Definition attributes of the entry (including Upload characteristics), TIU Document Parameters, and Business Rules. Consider inherited as well as explicit values. Any other implicit behavior, local or national, that applies to the entry must also be checked.

Although there is no harm in coping a Title to ANY document class in the hierarchy as long as the copy is not activated (since the copy has no documents), there is no reason to expect that such copies will function at all, much less function properly. You should either ensure that they function properly in every way, or delete such copies from the Document Definition file.

Copy COMPONENTS that have been given a new parent should also be checked by thoroughly testing the parent title as above. The copy action leaves the parent title of the copy component inactive. It is the user's responsibility to test the new parent title and then reactivate it so it is available to users for entering documents.

❖ **NOTE:** Although the action Copy *could* be used to change the behavior of an entry (i.e. change the copy and inactivate the original), it is better to use the actions Edit or Move and not clutter up the file with inactive entries.

Most behavior can be edited even when the entry is In Use by documents. Titles can be moved even when they are In Use by documents.

Copying Objects:
OBJECTS are copied from the Sort Option or the Create Objects Option. Object Abbreviation and Print Name are not copied, since they must be different from those of the original. If you don't have programmer access, the Object Method is not copied since it is an M field. Objects should be thoroughly tested before being activated.

Action Descriptions, *cont'd*

Move Title:
The action Move Title is accessed from the Edit option only, since it involves only entries in the Document Definition hierarchy.

Move Title permits:
- Moving TITLES
- Moving between DOCUMENT CLASSES within the same class

Move Title does not permit:
- Moving CLASSES or DOCUMENT CLASSES
- Moving COMPONENTS
  (The same effect can be achieved by deleting the component as an item from its parent,

  and adding it as an item to the new parent. This can be done even if the component is In Use.)
- Moving NATIONAL STANDARD titles
- Moving titles which are not in the DOCUMENT DEFINITION HIERARCHY
- Moving titles between CLASSES
- Moving faulty titles (known as faulty to the computer)
- Moving titles to faulty DOCUMENT CLASSES
- Moves which result in a faulty title
  (For example, suppose the Title NURSE NOTE inherits its Print Method from its document class NIGHT NURSE DOCUMENT CLASS. Suppose DAY NURSE DOCUMENT CLASS has no Print Method. (This is not a fault since the titles under it could all have their own Print Methods.) If you move NURSE NOTE from NIGHT NURSE DOCUMENT CLASS to DAY NURSE DOCUMENT CLASS, then the title lacks a Print Method and becomes faulty. Documents using the title don't print. In this case, the title must first be given its own Print Method, and *then* moved.)

The above restrictions are intended to prevent moves between Document Classes with very different behavior. However, hierarchies vary, and some structures will still permit risky moves. For example, if Consults are under Progress Notes, you can move a nonconsult Title to the Document Class CONSULTS. This sort of move is *not* advised. Anyone contemplating such a move should carefully read the paragraphs below on the Consequences of Moves between Very Different Document Classes.

Moving a title automatically inactivates it. Therefore, managers should move titles only during off-peak hours. After the title is inactivated and moved under a new Document Class, the MT action attempts to update the PARENT DOCUMENT TYPE field (#.04) for existing documents of the title. This may take awhile if there are many documents to update. (If certain documents were not updated, you must update them later, using the action Update Documents.) When the action is finished, the title is left INACTIVE.

Action Descriptions, cont'd

Checking the Title:
Since the title has changed position within the hierarchy, its behavior may have changed. It is the user's responsibility to thoroughly check its new behavior, and then to reactivate it so it is available for entering new documents.

The check should include Document Definition attributes of the entry (including Basic, Technical, and Upload fields), TIU Document Parameters, and Business Rules. Consider inherited as well as explicit values. Any other implicit behavior, local or national, that applies to the entry must also be checked.

It is possible that the Document Definition action TRY might state that an entry looks OK when it still does not function. For example, the action TRY may quit without continuing on to let you enter a trial document. In such a case, check the title's Document Definition Fields against a different title that DOES work. (The TRY action checks that fields *exist*, but does not check whether or not they function properly.)

Possible Consequences of Moves between Very Different Document Classes:

Some behaviors are explicit, being determined by parameters, Business Rules, etc. Others are implicit. For example, a Consult document is linked to a request when it is created, while a Progress Note document is not. These differences mean, for example, that one document may belong to a given cross-reference or have a certain field, while another lacks the field and is not in the cross-reference. Furthermore, the entry may have Business Rules, parameters, etc., which are not appropriate in its new position. It may also be lacking necessary ones.

Except for updating the PARENT DOCUMENT TYPE field (#.04) for documents of a title, the COPY/MOVE actions simply move the entry *as is*, making no attempt to ensure that it functions correctly in its new position. It is the user's responsibility to determine whether or not a move is reasonable, and to make all necessary changes to documents, Document Definitions, and rules/parameters.

This does NOT mean that all moves are dangerous.The more the difference in behavior and the greater the number of documents a title has, the greater the risk.

Moves may take awhile if a title has many documents. In the meantime, existing documents may not function properly, and users may not be able to enter given Titles.

On the other hand there should be little risk in moving, say, a Cardiology/Medicine Service Progress Note title from Document Class MEDICINE SERVICE to Document Class CARDIOLOGY.

Action Descriptions, *cont'd*

Move Documents:
Under this action, you select an old title and a new title. The action then attempts to move ALL the documents of the old title to the new title. After a document is moved, its Parent Document Type is updated if necessary. If some documents are not available for move/update, they can be moved later using the same action. The old title is then no longer In Use and can be deleted if desired.

The old title is inactivated while documents are moved, and left inactive. If you want it available for entering documents, you must reactivate it.

Move Documents does not permit:

- Moving documents from or to titles that have components
- Moving documents to a faulty title
- Moving documents between CLASSES
- Moving SELECTED documents (To move a particular document from one Title to another, use Hidden Action CT Change Title for that particular document.)

The behavior of documents is determined by their title. Therefore, moving documents from one title to another can affect their behavior. Users are responsible to make sure the behavior of the target title is appropriate *before* moving documents to it. Anyone contemplating a move between very different titles should carefully read the warnings under the action Move Title, above.

Update Documents:
This action is intended as a possible follow-up to Move Title. It will usually not be necessary since Move Title itself attempts to update documents defined by the moved title, giving them the correct new Parent Document Type. However, if a document is not available, then Move Title finishes, leaving that document with the old Parent Document Type.This may affect document behavior. It will cause CWADs to fail to generate alerts, and conversely will cause nonCWADs to generate CWAD alerts. It may have other consequences in the future. Update Documents is intended for this situation. It updates every document defined by a certain title to the correct Parent Document Type. It can be run multiple times if necessary and entails no risk.

Detailed Display/Edit Action Descriptions:

Basics
An entry's Status must be Inactive in order to edit most basic attributes. Enter ??? to see more information about the Status. If you have the Manager menu, you don't need to own an entry in order to edit it. Managers can edit Name, Abbreviation, Print Name, Type (if not In Use), Owner, Shared (for Components), Suppress Visit Selection, and Status.

Items: Seq Mnem MenuTxt
Item information (Mnemonic, Sequence, and Menu Text) is displayed for the selected entry. You may add, edit, or delete appropriate items if they are Inactive and have an Owner. You can view items of National entries, but only take limited actions on them. Items of Shared Components can be edited only via the Sort Option. Enter ??? to see Shared. Managers (persons with Manager menu) can edit items whether or not they own the parent entry.

Boilerplate Text
Boilerplate Text is the optional text a Document Definition may be given. It is displayed as the default, editable text of a TIU document when a TIU document is entered. Only Titles or Components may have Boilerplate Text, and only Inactive entries can be edited. Managers (persons with Manager menu) can edit the boilerplate text of entries regardless of Ownership, except Shared Components.

Technical Fields
Technical fields are mainly M code (which requires Programmer access), although some are just very technical, requiring detailed knowledge of the utility. Many Technical Fields can be inherited from ancestor entries.

Technical fields include: Entry Action, Exit Action, Edit Template, Print Method, Print Form Header, Print Form Number, Print Group, Visit Linkage Method, Validation Method, and Allow Custom Form Headers, except for Objects, which have only one technical field: Object Method.

Upload
TIU permits documents to be dictated and then uploaded into TIU or into other files. Upload information can be set by this action for TIUF Classes, Document Classes, or Titles, and is heritable.

Although upload information is heritable, it is NOT displayed by the Document Definition Utility when it is inherited rather than belonging to the entry itself. To Detailed Display existing upload information, Detailed Display the entry where such information is set rather than lower entries. Do NOT set partial information at a lower level; if information is set at all at a lower level, it must be complete at that level.
Upload information includes basic characteristics such as the file/field which will store the text of the document, as well as header information for each fixed-field to be uploaded.

Detailed Display/Edit Action Descriptions, cont'd

Try
The TRY action is a way to test Boilerplate Text and any embedded Objects. TRY examines the selected entry for basic problems. If the entry is a Title and checks out OK, you can choose a patient and enter a document using the entry.

TRY doesn't require any particular Status, since documents entered during the trial are deleted immediately after the trial. During the trial, objects function even if inactive in order to permit testing of objects. (Ordinarily, Object data isn't retrieved unless the Object is active, so be sure to activate when ready for use.)

If TRY is selected from the Boilerplate Text Screen,TRY shows which objects are badly embedded and why. If the entry is okay, you can enter a trial document. When checking boilerplate text, TRY doesn't check objects for ambiguity. Ambiguous objects are found by checking the OBJECT, not the entries the object is embedded in.

For Object, TRY checks the Object Name, Abbreviation, and Print Name to make sure they aren't ambiguous so that the right Object is invoked when being used. TRY checks to see if the Object has an Object Method, but doesn't check to see if the Object Method functions correctly.

For Classes, Document Classes, and Components, TRY just checks for basic completeness.

Since the document does show up on Unsigned lists during the time it is being edited, so it's best to select test patients for creating and testing boilerplate text.

Find
This action finds text in a list of entries/information displayed. All pages of the current list/ information are searched except unexpanded entries in the Edit Document Definitions Option. Using the Find action can be a quick way to get to the right page.

Quit
Allows you to quit the current menu level.

Example of Editing Basics

```
Select Action: Next Screen// BA Basics
NAME: NURSING - PATIENT EDUCATION NOTE  Replace...<Enter>
ABBREVIATION: PE
PRINT NAME: NURSING-PATIENT EDUCATION// <Enter>
TYPE: (CL/DC): DC// <Enter>  DOCUMENT CLASS
CLASS OWNER: CLINICAL COORDINATOR  Replace C... With <Enter>  Replace <Enter>
PERSONAL OWNER: grn,JO          jg
SUPPRESS VISIT SELECTION: NO// <Enter>
STATUS: (A/I/T): ACTIVE// <Enter>
```

Explanations for prompts in Edit Basics

NAME
The name of a Document Definition entry (.01 field) must be between 3 and 60 characters long and may not begin with a punctuation character. Although names can be entered in any case, they are transformed to upper case before being stored. It functions as the Technical Name of the entry. Some sites have put KWIC cross-references on it to get, say, all Titles from a given Service. The .01 name differs from the Print Name, which appears in lists of documents and functions as the Title of the document. It also differs from Menu Text (1-20 characters), which is used when selecting documents from menus.

ABBREVIATION
Two to four letters. Abbreviation can be entered at the *Select Title* prompt when entering a document. Since all Titles with the given abbreviation will then be listed, Abbreviation can serve to group Titles.

PRINT NAME
- Print Name is used in lists of documents and as the document Title in the Patient Chart. 3-60 Characters.

TYPE: (CL/DC)
- Class or Document Class

CLASS OWNER
- If the document is owned by a Class rather than by a Person, enter the name of the User Class whose members may edit the entry. If it's owned by a Person, delete the Class Owner by entering '@' at the Class Owner prompt. When Titles were converted from the old Progress Notes package, they were all given to the Class Owner, Clinical Coordinator. To enter a different Class Owner, enter the appropriate class after the //'s. If there are no //'s and the Replace...with editor is being used, enter ... to replace the whole class and then enter the appropriate class.
- Answer with USR CLASS NAME, or ABBREVIATION, or ACTIVE, or DISPLAY NAME.
- Document Definition Ownership has nothing to do with who can USE the entry to enter a document. It determines responsibility for the Document Definition itself.
- An entry can be *edited* by its owner. (The Manager menu permits override of ownership so that ownership can be assigned to a clinician (person with Clinician Menu) who can then fill in boilerplate text, while the manager can still edit the entry, since there are many fields the clinician doesn't have access to.)
- A Class Owner is a User Class from the USR CLASS file whose members may edit the entry. An entry may have a Personal OR a Class Owner, not both. The program doesn't prompt for Class Owner if the entry has a Personal Owner.

Explanations for prompts in Edit Basics, cont'd

SUPPRESS VISIT SELECTION
- Enter 1 for YES *only if* this is an administrative note which creates its own historical visit. You will NOT receive workload credit for such visits.
- For most documents it is very important that the user entering a document select the appropriate visit to link the document with. However, certain administrative documents for outpatients have no particular visit that they should be linked with. For example, a clinician could have a chance encounter with a patient in the corridor and want to document the discussion, or a clinician could simply want to remind him/herself of something for a given patient.
- Documents for such purposes can be set to automatically create their own historical visit when they are entered, so that the user is not asked to select a visit.

STATUS: (A/I/T)
- A=Active, I=Inactive, T=Test
- Documents can be entered on ACTIVE Titles.
- Only the Owner can enter a document on TEST Titles.
- Only INACTIVE Document Definitions can be edited.

Hidden Action Descriptions for all Document Definition options.

Action	Description
Next Screen	Enter + to move down to the next screen of entries/information. .
Previous Screen	Enter the **-** character to move up to the previous screen of entries/ information.
Up One Line	Enter UP to move up a line.
Down A Line	Enter DN to move down a line.
Right	Enter > to scroll to the right one column when >> shows on the message bar. Most screens display essential information which can only be seen by scrolling to the right. You can also enter >=5 for example, to scroll 5 characters to the right, or >=> to scroll to the rightmost position.
Left	Enter < to scroll left when << shows on the message bar. Enter < to scroll left to the next column or enter <=5 to scroll 5 characters to the left, or enter <=< to scroll to the leftmost column.
First Screen	Enter FS to display the first screen of entries/information.
Last Screen	Enter LS to display the last screen of entries/information.
Go To Page	Enter GO to choose a page to go to. You can also enter GO=3, for example to go to page 3 in a single step.
Print	All document definition printing is done through the hidden actions, Print Screen and Print List. First locate the data to be printed so that it shows on the screen, and then select either PS or PL. To locate the appropriate data use the Edit, Sort, or Create option to list appropriate entries. *Edit Document Definitions* shows the hierarchy. *Sort Document Definitions* shows sorted document definitions including Orphans, Objects, and Shared Components. *Create Document Definitions* shows a particular line of descent of the hierarchy. *Create Objects* shows only Objects.To print information on a single given entry, 1) locate the entry in one of the above lists, 2) select Detailed Display or Edit Items, 3) select action PS or PL.
Print Screen	Enter PS for Print Screen. It *only* prints what is currently visible on the screen, ignoring information that can be moved to horizontally or vertically (pages), so you should move left/right and up/down to the desired information before printing.
Print List	Enter PL for Print List to print more than one visible screen of information. Print List prints the entire vertical list of entries/ information, including entries/information not currently visible but which are displayed when you move up or down. If the action is selected from the leftmost position of the screen, you're asked whether to print ALL columns or only those columns visible on the current leftmost position of the screen. If you select the action after scrolling to the right, only the currently visible left/right columns are printed.
Find	Finds text in list of entries/information displayed. The action searches all pages of list/information, but cannot 'see' the expansion for unexpanded entries in the Edit Document Definitions Option. Can be a quick way to get to the right page.
Quit	Quit takes you out of the current level of the hierarchy and back to the previous level or menu.

Matrix of Actions allowed per Status and Ownership

User: For Document Definition, IRMS, Clinical Coordinators, or service managers authorized to maintain the Document Definition Hierarchy. Only programmers can create objects or edit Technical Fields.

Owner: Either Personal Owner or Class Owner; the person who creates or is assigned responsibility for the document definition being acted on. Items under the relevant type may have separate owners (that is, A may own the Document Class, but B could own a Title under the Document Class.

Status: A=Active, I=Inactive, T=Test

Type	Status	User	Actions	Limitations
Class, Document Class	A	Any	• Edit Status, Owner • Add new items to Class *(Class or Document Class),* or to Document Class (*Titles*).	Nat'l Standards can't be edited. Must own the *items*.
	I	Any	• Edit Basics and Upload Fields.	
	I	Owner	• Delete as entry from file.	Entry can't be In Use.
Title	A, T	Any	• Edit Status and the Owner.	
	I	Any	• Add items (*components*). • Edit Basics and Boilerplate Text .	Only owners can add non-Shared Components. Item can't already have a parent.
	I	Owner	• Delete file entry.	If not In Use.
Component	A,T	Any	• Edit the Owner.	
	I	Any	• Add new items (*components*). • Edit or delete its items. • Edit Basics and Boilerplate Text.	Users must own items.
	I	Owner	• Delete entry from file.	If not In Use.
Shared Component	N/A	Any	• Add entry as an item to a Title or Component.	
		Owner	• Edit Basics and Boilerplate Text.	All parents must be Inactive.
Object		Any	• Embed Object in Boilerplate Text.	
	I	Any	• Edit Owner.	Component or Title must be Inactive.
	I	Owner	• Edit Object Basics and Technical Fields.	Only programmers can edit Technical Fields.

Creating Boilerplate Text

Boilerplate Text is similar to a template or overprint. It includes commonly used headings, phrases, or forms, which can be completed by a clinician or other user. TIU provides the means for sites and individuals to create specific boilerplate documents for most of the commonly used progress notes, discharge summaries, or other clinical documents. Also, boilerplates can be copied and modified by individuals, departments, sites, or between sites.

Objects are names representing executable M-code, which may be "embedded" in the predefined boilerplate text of titles. This allows patient-specific text to be inserted into a document when a user selects a TIU document. The Object "PATIENT AGE" may be used to insert the value of the patient's age at an arbitrary location within a document. To see a list of Objects available at your site, use the option *Create Objects.*

Boilerplate text documents may be composed of static text, Objects, or a combination of the two. Examples of static test are captions, complete sentences, or section headings for a SOAP note.

Examples:

1. The boilerplate text document "Dr. Jones' Clinic Note" contains the following default text and Objects (the names between the "|" symbols):

```
The patient is a |PATIENT AGE| year old |PATIENT RACE|
|PATIENT SEX|, who presented to the |VISIT LOCATION| on
|VISIT DATE| with |CHIEF COMPLAINT|.
```

When Dr. Jones opens this boilerplate document in TIU, values are inserted to replace Objects.

```
The patient is a 55 year old white male, who presented to the
Cardiology Clinic on October 27, 1996 with chest pains.
```

Boilerplate Text

2. The Adverse Reaction/Allergies component of a discharge summary is an
example of a more complex Object.

```
ADVERSE REACTION/ALLERGIES
|ALLERGIES/ADR|
```

The resulting text may look like this:

```
ALLERGIES/ADVERSE REACTION:
Milk, Amoxicillin
```

General Information

Boilerplate text may be added to any title. Boilerplate text is specific to that
document definition and is not Shared. Boilerplate text may contain Objects.
Components may also contain boilerplate text, with embedded Objects.

Objects must always have uppercase names, abbreviations, and print names. When
embedding objects in boilerplate text, use any of these three (the Name,
Abbreviation, or Print Name) enclosed by "|s." Objects must always be embedded
in uppercase. Objects must initially be written by programmers. (See a description
of writing an object on page 67.) Once defined, Objects may be used any number
of times within an unlimited number of different titles.

As sites develop their own Objects, they can be shared with other sites through a
mailbox entitled TIU OBJECTS in SHOP,ALL (reached via FORUM).

☞ **NOTE:**   Object routines used from SHOP,ALL are *not* supported by the
Field Offices. Use at your own risk!

Boilerplate Text

Objects can have Inactive or Active Statuses. Only ACTIVE objects function. That is, if you enter a document on a Title with boilerplate text containing an inactive object, the object doesn't do anything. You see the name of the object and an error message in place of the object data. Only ACTIVE objects should be embedded in boilerplate text, except when owners are creating or editing objects.

Only INACTIVE objects can be edited (and only by an owner). Only an owner can activate or inactivate an object. Active objects are assumed to be ready for use in any boilerplate text.

Since the owner is essentially the caretaker of the object for the entire site, the owner should consult with all who use it before editing it. An object can be tested by embedding it in the boilerplate text of a Title and selecting the action "Try" for the Title. It doesn't need an Active status for this testing and shouldn't have an Active status until testing is complete. Owners who inactivate objects for editing should make sure to reactivate them if they are being used.

Example of creating boilerplate text

1. At the title level in the hierarchy, select Detailed Display and the number of the document you want to add boilerplate text to.

```
Create Docmt Definitions        Oct 01, 1996 11:26          Page:  1 of   1
                                     BASICS

+      Name                         Type  In Use Boil Print Name
4        RADIOLOGY NURSING NOTE        TL      No    No   RADIOLOGY NURSING




   <<<     ? Help        +, - Next, Previous Screen                      >>>
   (Class/DocumentClass)   Next Level                Detailed Display
   Title                   Restart                   Status...
   Component               Boilerplate Text          Delete
Select Action: Create Title// DET  Detailed Display
Select Entry:  (4-4): 4
```

Creating Boilerplate Text cont'd

2. The details of the document are displayed. Select BO for Boilerplate Text.

```
Detailed Display            Oct 01, 1996 11:29:10        Page:  1 of  2
                        Title RADIOLOGY NURSING NOTE

  Basics              Note: Inherited Values preceded by *
          Name:    RADIOLOGY NURSING NOTE
   Abbreviation:
    Print Name:    RADIOLOGY NURSING NOTE
          Type:    TITLE
           IFN:    1087
      National
      Standard:    NO
        Status:    INACTIVE
         Owner:    GREEN,JOANN
        In Use:    NO
    Additional
       Signers: *  ALLOWED
 Suppress Visit
     Selection:    NO

  Items
+           ? Help          +, - Next, Previous Screen
     Basics                      Technical Fields          Find
     Items:Seq Mnem MenuTxt      Upload                    Quit
     Boilerplate Text            Try
Select Action: Next Screen// BO
```

3. Your preferred screen editor is displayed (in this case, FileMan Text Editor). Type in the text, including objects, in your document boilerplate text:

```
  1>      NAME: |PATIENT NAME|
  2>       DOB: |PATIENT DATE OF BIRTH|
  3>
  4>ALLERGIES: |ALLERGIES/ADR|
  5>
  6>    LIPIDS: |BASELINE LIPIDS|

EDIT Option: <Enter>
```

Creating boilerplate text cont'd

4. To see how this boilerplate text you created will work in a document, select the
action *Try*.

```
Detailed Display         Oct 01, 1996 15:42:01      Page:   2 of  3
                         Title RADIOLOGY NURSING NOTE
+
No Items

  Boilerplate Text
     NAME: |PATIENT NAME|
      DOB: |PATIENT DATE OF BIRTH|

ALLERGIES: |ALLERGIES/ADR|
LIPIDS: |BASELINE LIPIDS|

  Technical Fields      Note: Inherited Values preceded by *
+         ? Help        +, - Next, Previous Screen
     Basics                  Technical Fields        Find
     Items:Seq Mnem MenuTxt  Upload                  Quit
     Boilerplate Text        Try
Select Action: Next Screen// TR      Try
```

5. The following text and prompts appear. The boilerplate text you created appears in the
format of the text editor you use.

```
Entry Checks out OK. Checking Title on a document. You will not be
permitted to sign the document, and the document will be deleted at the
end of the check.

Be sure to select a TEST PATIENT since the document will show up on
Unsigned lists while you are editing it.


Select Patient:  DOE,WILLIAM C.        09-12-44     243236572     YES
SC VETERAN
          (2 notes)  C: 05/28/96 12:37  (addendum 08/12/96 16:04)
                    A: Known allergies

This patient is not currently admitted to the facility...

Is this note for INPATIENT or OUTPATIENT care? OUTPATIENT// <Enter>

The following VISITS are available:

  1>  APR 18, 1996@10:00                 GENERAL MEDICINE
  2>  FEB 21, 1996@08:40                 PULMONARY CLINIC
CHOOSE 1-2 or <N>EW VISIT
<RETURN> TO CONTINUE
OR '^' TO QUIT: 1
```

Creating Boilerplate Text cont'd

```
Creating new progress note...
         Patient Location:  GENERAL MEDICINE
       Date/time of Visit:  04/18/96 10:00
        Date/time of Note:  NOW
           Author of Note:  GREE,JON
   ...OK? YES// <Enter>

Calling text editor, please wait…
Gathering Allergy Data…

=[ WRAP ]==[ INSERT ]===< Patient: DOE,WILLIAM C. >==[ <PF1>H=Help ]====
     NAME: DOE,WILLIAM C.
      SEX: MALE
      DOB: SEP 12,1944

ALLERGIES: Amoxicillin, Aspirin, MILK

   LIPIDS: No data available


<======T=======T=======T=======T=======T=======T=======T=======T========
Saving Text……
<Nothing Entered, Radiology Nursing Note Deleted>
```

Example of editing boilerplate text

1. Select Detailed Display from your *Create Document Definition* option.

```
Select Action: Next Screen// DET  Detailed Display
Select Entry: (50-63): 50
Detailed Display              Oct 01, 1996 11:57:11    Page:  1 of   3
                          Title RADIOLOGY NOTE

  Basics           Note: Inherited Values preceded by *
           Name:   BP TEST
   Abbreviation:
    Print Name:    BP TEST
           Type:   TITLE
            IFN:   981
       National
        Standard:  NO
          Status:  ACTIVE
           Owner:  RUSSELL,JOEL
          In Use:  YES
       Additional
         Signers: * ALLOWED


  Items
+           ? Help          +, - Next, Previous Screen
      Basics                    Technical Fields          Find
      Items:Seq Mnem MenuTxt    Upload                    Quit
      Boilerplate Text          Try
Select Action: Next Screen// B     Boilplt Txt
```

2. Select the *Boilerplate Text* action. Your preferred screen editor appears and the boilerplate text already created for this Title.

```
==[ WRAP ]==[ INSERT ]============< BP TEST >========[ <PF1>H=Help ]====
     NAME: |PATIENT NAME|
      SEX: |PATIENT SEX|
      DOB: |PATIENT DATE OF BIRTH|

ALLERGIES: |ALLERGIES/ADR|

LIPIDS: |BASELINE LIPIDS|
```

3. Just type in new text (including Objects) or edit existing text, according to the methods of the text editor you normally use in your work (in this case FileMan Screen Editor).

```
     HT: |PATIENT HEIGHT|
     WT: |PATIENT WEIGHT|

<====T=======T======T=======T=======T=======T======T=======T=======T=>===
```

Creating Objects

The Create Objects option may be assigned to any TIU manager, coordinator, or IRMS specialist, but only programmers can create Objects.

The Create Objects option lets you review current Objects and then perform various actions, such as Create, Copy, and Delete, depending on yours and the Object's status. Only Inactive objects can be edited (and only by an owner). Only an owner can activate or inactivate an object. Active objects are assumed to be ready for use in any boilerplate text.

See the next section for an example of creating an Object.

```
                  --- Manager Document Definition Menu ---

    1       Edit Document Definitions
    2       Sort Document Definitions
    3       Create Document Definitions
    4       Create Objects

You have PENDING ALERTS
        Enter  "VA   VIEW ALERTS     to review alerts

Select Document Definitions (Manager) Option: 4  Create Objects

START WITH OBJECT: FIRST// <Enter>........................................
...................
```

```
Objects                      Feb 28, 1997 09:52:16      Page:    1 of    3
                                Objects


                                                                    Status
1       ACTIVE MEDICATIONS                                             A
2       ALLERGIES/ADR                                                  A
3       BASELINE LIPIDS                                                A
4       BLOOD PRESSURE                                                 A
5       CURRENT ADMISSION                                              A
6            NOW
        A
7            PATIENT AGE
        A
8            PATIENT DATE OF BIRTH
        A
+          ?Help   >ScrollRight   PS/PL PrintScrn/List   +/-            >>>
    Find                     Detailed Display        Copy
    Change View              Try                     Quit
    Create                   Owner
Select Action: Next Screen//
```

Creating an Object Example

To create an object, you must be familiar with M code at least well enough to read and copy it.

In this example, we create a very simple object, test it, make it more realistic, and then re-test it. After that, we'll present further issues to consider.

A. Create a very simple Object.

We'll create an object called PATIENT RELIGION that inserts the patient's religion into the text of a document.

1.   Go into the option *Create Objects* and select the action Create:

```
Select TIU Maintenance Menu Option: 2  Document Definitions (Manager)

   --- Manager Document Definition Menu ---
   1      Edit Document Definitions
   2      Sort Document Definitions
   3      Create Document Definitions
   4      Create Objects

Select Document Definitions (Manager) Option: 4  Create Objects

START WITH OBJECT: FIRST// <Enter>......................................
```

```
Objects                       Mar 09, 1997 16:10:12     Page:    1 of    3
                                  Objects
+                                                                  Status
1      ACTIVE MEDICATIONS                                             A
2      ALLERGIES/ADR                                                  A
3      BASELINE LIPIDS                                                A
4      BLOOD PRESSURE                                                 A
5      CURRENT ADMISSION                                              A
6      FASTING BLOOD GLUCOSE                                          A
7      HEMOGLOBIN A1C                                                 A
8      INR VALUE                                                      A
9      LABS ADMISSION ABNORMAL                                        A
10     LABS ADMISSION ALL                                             A
11     NOW                                                            A
12     PATIENT AGE                                                    A
13     PATIENT DATE OF BIRTH                                          A
14     PATIENT DATE OF DEATH                                          A
+          ?Help   >ScrollRight   PS/PL PrintScrn/List   +/-         >>>
       Find                    Detailed Display        Copy
       Change View             Try                     Quit
       Create                  Owner
Select Action: Next Screen// <Enter>
```

Creating an Object, cont'd

```
Objects                    Mar 09, 1997 16:13:44  Page:   2 of    3
                                Objects
+                                                               Status
15     PATIENT HEIGHT                                              A
16     PATIENT NAME                                                A
17     PATIENT RACE                                                A
18     PATIENT RELIGION                                            A
19     PATIENT SEX                                                 A
20     PATIENT SSN                                                 A
21     PATIENT WEIGHT                                              A
22     PROTHROMBIN TIME                                            A
23     PROTHROMBIN TIME COLLECTED                                  A
24     PULSE                                                       A
25     RESPIRATION                                                 A
26     SGOT                                                        A
27     TEMPERATURE                                                 A
28     TODAY'S DATE                                                A
+          ?Help   >ScrollRight   PS/PL PrintScrn/List  +/-         >>>
      Find                    Detailed Display         Copy
      Change View             Try                      Quit
      Create                  Owner
Select Action: Next Screen// ??
```

2. Select the action Create.

```
Objects                    Mar 05, 1997 15:03:12       Page:    1 of    3
                                Objects
                                                               Status
1      ACTIVE MEDICATIONS                                        A
2      ALLERGIES/ADR                                             A
3      BASELINE LIPIDS                                           A

+          ?Help   >ScrollRight   PS/PL PrintScrn/List  +/-         >>>
      Find                    Detailed Display         Copy
      Change View             Try                      Quit
      Create                  Owner

Select Action: Next Screen// CR    Create
```

3. Enter PATIENT RELIGION.
4. Delete the default owner CLINICAL COORDINATOR with an @ sign and enter your own name as the personal owner. This enables you to continue editing the object.

```
Enter Document Definition Name to add as New Entry: PATIENT RELIGION
CLASS OWNER: CLINICAL COORDINATOR  Replace @
PERSONAL OWNER: MCCLENAHAN,MARGARET          MAM
 Entry added
```

5. The new object appears at the top of the list.
6. Scroll right (>) to see that you are the owner.
7. Select the action Detailed Display and select your new entry.

☞ **NOTE:** You can do this in one step by entering DET=(entry number):

```
Objects                   Mar 05, 1997 15:03:12        Page:  2  of  3
                              Objects
                                                                 Status
18      PATIENT RELIGION                                           I
19      PATIENT SEX                                                A
20      PATIENT SSN                                                A


+           ?Help   >ScrollRight   PS/PL PrintScrn/List   +/-           >>>
     Find                       Detailed Display        Copy
     Change View                Try                     Quit
     Create                     Owner
Select Action: Next Screen// DET=18    Detailed Display
```

8. The Detailed Display screen appears, showing your entry.

9. Select the action Technical Fields.

```
Detailed Display        Mar 05, 1997 15:03:58       Page:   1 of    1
                     Object PATIENT RELIGION
 Basics
          Name:    PATIENT RELIGION
   Abbreviation:
    Print Name:    PATIENT RELIGION
          Type:    OBJECT
           IFN:    599
       National
      Standard:    NO
        Status:    INACTIVE
         Owner:    MCCLENAHAN,MARGARET

 Technical Fields
      Object Method:
+           ?Help   >ScrollRight   PS/PL PrintScrn/List   +/-           >>>
     Find                       Detailed Display        Delete
     Basics                     Technical Fields        Find
     (Items: Seq Mnem MenuTxt)  (Upload)                Quit
     (Boilerplate Text)         Try
Select Action: Quit// TE   TECHNICAL FIELDS
```

10. Enter the object method: S X="TESTING123"

```
OBJECT METHOD:   S X="TESTING123"
```

B. Testing the Object

Now that we have a new object, let's try it out.

1. Quit all the way out of Create Objects.

2. Go into the option *Create Document Definitions*:

```
--- Manager Document Definition Menu ---

    1      Edit Document Definitions
    2      Sort Document Definitions
    3      Create Document Definitions
    4      Create Objects

Select Document Definitions (Manager) Option: 3   Create Document Definitions
```

3. Find or create a title you wish to embed the new object in.

♦ If it's active, make a copy rather than inactivating the original which takes it offline to users.

♦ Use an item under an active document class so that later you can change its status to "Test."

♦ Use a Title under Progress Notes so that it inherits from Progress Notes.

♦ Make its status Inactive so you can edit it.

♦ Check it using the action Try to make sure it works properly before continuing this process (do a Detailed Display and select TRY).

4. We'll use the Title DEMOGRAPHIC NOTE, under the Document Class DEMOGRAPHIC NOTE, under Progress Notes.

5. When you have your title, select the action Boilerplate Text and your title:

```
Create Document Definitions    Mar 05, 1997 15:05:23        Page: 1 of  1
                               BASICS
+      Name                                                          Type

  2       PROGRESS NOTES                                             CL
  3         DEMOGRAPHIC NOTE                                         DC
  4           DEMOGRAPHIC NOTE                                       TL

+          ?Help    >ScrollRight    PS/PL PrintScrn/List   +/-          >>>

       (Class/DocumentClass)    Next Level            Detailed Display
       Title                    Restart               Status...
       (Component)              Boilerplate Text      Delete
Select Action: Title// BO=4
```

Testing the Object, cont'd

6. The Boilerplate Text screen is displayed. At present, there is no text.
7. Select Boilerplate Text again, this time to edit it (rather than display it):

```
Boilerplate Text           Mar 05, 1997 15:05:37        Page:    1 of    1
                          Title DEMOGRAPHIC NOTE
_____




+          ?Help    >ScrollRight    PS/PL PrintScrn/List   +/-              >>>
      Boilerplate Text          Try                    Quit
      Status                    Find
Select Action: Quit// B   Boilerplate Text
```

8. Your preferred editor appears. Type in the following:

```
======[WRAP]==[INSERT]=<DEMOGRAPHIC NOTE>===[<PF1>H=HELP]=========
Patient's religious preference: |PATIENT RELIGION|. Patient's home address: ……


=====T=====T=====T=====T=====T=====T=====T=====T=====T=====T
```

☞ **NOTE:** Be sure to spell the object name correctly, use upper case, and enclose it in vertical bars**:**

9. Exit out of the editor. The screen displays our new boilerplate text.

10. Select the action TRY:

Testing the Object cont'd

```
Saving text ...
Boilerplate Text               Mar 05, 1997 15:05:37        Page:   1 of    1
                           Title DEMOGRAPHIC NOTE
_____
Patient's religious preference: |PATIENT RELIGION|. Patient's home address: …




+            ?Help   >ScrollRight   PS/PL PrintScrn/List   +/-              >>>
     Boilerplate Text            Try                      Quit
     Status                      Find
Select Action: Quit// Try
Entry Checks out OK for rudimentary completeness
```

11. The entry checks out OK.
12. Select a TEST patient. (Since it's a title, you are given the opportunity to try it on a patient.)
13. Accept the defaults for location, etc.
14. You are presented with the boilerplate text, just as if you had entered a document Demographic Note on the patient:

```
Object |PATIENT RELIGION| is not active.

Press RETURN to continue or '^' or '^^' to exit:  <Enter>

Checking Title on a document.  You will not be permitted to sign the document,
and the document will be deleted at the end of the check.

 Be sure to select a TEST PATIENT since the document will show up on Unsigned
lists while you are editing it.

Select PATIENT NAME: DOE,WILLIAM C.      09-12-44     243236572     YES
  SC VETERAN
           (2 notes)  C: 02/24/97 08:44
           (1 note )  W: 02/21/97 09:19
                      A: Known allergies

Creating new progress note...
         Patient Location:  UNKNOWN
       Date/time of Visit:  03/05/97 15:07
        Date/time of Note:  NOW
           Author of Note:  MCCLAN,MARGE
   ...OK? YES// <Enter>

Calling text editor, please wait…


 ======[WRAP]==[INSERT]=< >===[<PF1>H=HELP]==================
Patient's religious preference: TESTING123.  Patient's home address: …

======T=====T=====T=====T=====T=====T=======T=======T=======T=======T
```

Testing the Object cont'd

15.   The trial document looks all right. The data we set X to is inserted in the text.

☞   **NOTE:**   If there are errors in the object other than the status, we may receive
                       any of the following messages:

```
Object |PATIENT RELIGION| cannot be found. User uppercase and use
object's exact name, print name, or abbreviation. Objects' name/print
name/abbreviation may have changed since this was embedded.
Object |PATIENT RELIGION| is not active.
Object |PATIENT RELIGION| lacks an object method.
Object |PATIENT RELIGION| is ambiguous. Can't tell which object is
intended.
Object split between lines, rest of line not checked.
```

The split line message refers to lines such as:

```
This is a test of Object |PATIENT
RELIGION|. Patient's Home address: . . .
```

But none of these messages apply to us.

16.   Exit the editor. The document is deleted:

```
Saving text ...
<NOTHING ENTERED. DEMOGRAPHIC NOTE DELETED>
```

C. Making the Object More Realistic

Now that we have the basic idea, we'll write an object method that actually gets the
patient's religion. We'll imitate the PATIENT AGE object, which has the object method:

```
      S X=$$AGE^TIULO(DFN)
```

Note that, again, the object method sets the variable X. This time the object depends on
the patient. The variable DFN is the internal entry number in the Patient File ^DPT. Its
value is known to the system at the time a document is entered on a particular patient.

Making the Object More Realistic, cont'd

This object method calls the TIULO routine, exported with the TIU package, and sets X equal to the value of the function $$AGE^TIULO. That code looks like this:

```
TIULO ; SLC/JER - Embedded Objects ;9/28/95 16 :26
      ;;1.0;TEXT INTEGRATION UTILITIES;;Mar 05, 1997
AGE(DFN)    ; Patient AGE
      I '$D(VADM(4)) D DEM^TIULO(DFN,.VADM)
      Q $S(VADM(4)]"":VADM(4),1:"AGE UNKNOWN")
      ;
DEM(DFN,VADM)      ; Calls DEM^VADPT
      D DEM^VADPT
      Q
```

If the VADM array hasn't been defined for subscript 4, the age subscript, the code calls module DEM, passing array VADM by reference. DEM calls the VADPT patient demographics utility, and passes patient demographics back. We can copy this and only need to understand that it puts demographic information for patient DFN in the VADM array as described in the VADPT utility.

Note that AGE is a function and quits with the value VADM(4) if VADM(4) has a value. Otherwise, it quits with the value "AGE UNKNOWN."

We'll write similar code for religion.

1. Quit out of the Manager Menu and get into programmer mode.
2. Write a similar function for religion. Looking up the VADPT utility, we find that patient religion is returned in VADM(9), so we have:

```
MYROUTIN       ; HERE/ME - Embedded Objects ; 9/28/96 16:26
          ;
RELIG (DFN)  ; Patient RELIGION
      I '$D(VADM(9)) D DEM^TIULO(DFN,.VADM)
      Q $S(VADM(9)]"":VADM(9),1:"Religious Preference UNKNOWN")
```

3. To test the code, set DFN to a known patient. (To find the DFN of a patient, do a Fileman Inquiry to the PATIENT file, enter the name of a patient, and enter R at the Include COMPUTED fields prompt to get the record number. Set DFN to this record number.).
4. Set X= $$RELIG^MYROUTIN(DFN).
5. WRITE !,X:

```
      W !,X
      OTHER
```

Making the Object More Realistic, cont'd

This patient's religion is listed as "OTHER."

6. When the code has been thoroughly tested on several different patients, including some who have no religion in the patient file, go back to the option Create Objects.

7. Select the action Detailed Display for object PATIENT RELIGION,

8. Select the action Technical Fields

9. Edit the object method to:

```
            S X=$$RELIG^MYROUTIN(DFN)
```

```
Detailed Display           Mar 05, 1997 15:03:58        Page:    1 of   1
                      Object PATIENT RELIGION
_____
 Basics
          Name:   PATIENT RELIGION
   Abbreviation:
     Print Name:   PATIENT RELIGION
           Type:   OBJECT
            IFN:   599
        National
        Standard:   NO
          Status:   INACTIVE
           Owner:   MCCLENAHAN,MARGARET
Object Method: S X=$$RELIG^MYROUTIN(DFN)
Technical Fields
+         ?Help    >ScrollRight   PS/PL PrintScrn/List   +/-               >>>
     Basics                  Technical Fields        Find
     Items: Seq Mnem MenuTxt  Upload                  Quit
     Boilerplate Text         Try
```

10. While we're here, let's go in, put in an abbreviation for the object, and namespace the print name. To do so, we select the action Basics:

```
Select Action: Quit// BA  BASICS

NAME: Since objects are embedded by name, abbreviation, or print name, NOT by
file number, your edit of name, abbreviation, or print name may affect which
titles have the object embedded in them. You may want to note the list of titles
NOW before it changes.
Press RETURN to continue or '^' or '^^' to exit:  <Enter>
```

Making the Object More Realistic, cont'd

Since our object is new and we know it's only in DEMOGRAPHIC NOTE, we'll disregard the warning and enter a new Name and an abbreviation. We'll keep the old print name and up-arrow out:

```
      NAME: DEM PATIENT RELIGION// <Enter>
      ABBREVIATION: RELI
      PRINT NAME: PATIENT RELIGION// ^
```

```
Detailed Display            Mar 05, 1997 15:03:58     Page: 1 of  1
                           Object PATIENT RELIGION
_____
 Basics
            Name:   DEM PATIENT RELIGION
    Abbreviation:   RELI
      Print Name:   PATIENT RELIGION
            Type:   OBJECT
             IFN:   599
        National
        Standard:   NO
          Status:   INACTIVE
           Owner:   MCCAN,MARGE

Technical Fields
        Object Method: S X=$$RELI^MYROUTIN (DFN)

Object is embedded in Title(s)       Status   Owner    IFN
DEMOGRAPHIC                           I        ME       567
░░░░░░░░░░░? Help░░░░░+,░-░Next,░Previous░Screen░░░░░░░PS/PL░░░░░░
      Basics                  Try              Delete
      Technical Fields        Find             Quit

Select Action: Quit//  <Enter>
```

D. Testing the More Realistic Object

When the Object Method, Name, Abbreviation, and Print Name are all as we wish, we again test the Object. Before trying our title DEMOGRAPHICS as we did before, we will try the object itself.

1.   While still in the above Object Detailed Display screen, select the action TRY. We get the message:

```
Select Action: Quit// T
Entry checks out OK for rudimentary completeness
```

Testing the More Realistic Object, cont'd

This is an important step. If there were problems, we might have gotten any or all of the following messages:

```
Faulty Entry: No Object Method
Faulty Entry: Object Name finds multiple/wrong object(s)
Faulty Entry: Object Abbreviation finds multiple/wrong object(s)
Faulty Entry: Object Print Name finds multiple/wrong object(s)
```

The first message appears if the object has no Object Method. Unfortunately, this doesn't tell us whether the Object Method functions correctly. It only tells us the entry has or doesn't have an Object Method. We know it functions correctly because we tested the code.

We get one or more of the other messages if our object has a duplicate Name, Abbreviation, or Print Name with some other object. This would cause our object not to be found when that Name, Abbreviation, or Print Name is used in boilerplate text. We also get such a message if, for example, our object Abbreviation is the same as the Name of another object. In that case we would get the message:

```
Faulty entry: Object Abbreviation finds multiple/wrong object(s).
```

If this happens, our object might find and insert the WRONG object into boilerplate text. We must change the abbreviation so it doesn't match the name, abbreviation, or print name for another object.

Once we have thoroughly tested the Object Method code, put in Name, Abbreviation, and Print Name as desired, and gotten a clean TRY when we tried the OBJECT, we can now try our title containing the object.

2. Quit out of *Create Objects*
3. Go into the option *Create Document Definitions*
4. Use the action Next Level to drill down to our title
5. Select the action Boilerplate Text
6. Select the title

```
Create Document Definitions   Mar 05, 1997 15:05:23      Page:  1 of  1
                               BASICS
+    Name                                                           Type
2  PROGRESS NOTES                                                    CL
3        DEMOGRAPHIC NOTE                                            DC
4           DEMOGRAPHIC NOTE                                         TL


?Help         >ScrollRight        PS/PL PrintScrn/List   +/-           >>>
     (Class/DocumentClass)      Next Level          Detailed Display
     Title                      Restart             Status...
     (Component)                Boilerplate Text    Delete
Select Action: Title// BO=4
```

Testing the More Realistic Object, cont'd

7. The Boilerplate Text that we entered previously is displayed. We changed the name of the object, but we don't need to make that update here since the Print Name is PATIENT RELIGION, and the Print Name will do just as well as the name.

8. Select the action Try.

```
Boilerplate Text               Mar 05, 1997 15:05:37       Page:    1 of
                             Title DEMOGRAPHIC NOTE
_____
Patient's religious preference: |PATIENT RELIGION|. Patient's home address:…



          ? Help         +, - Next, Previous Screen        PS/PL
     Boilerplate Text                Try                       Quit
     Status                          Find
Select Action: Quit// Try
```

9. Enter a test patient
10. Accept the defaults
11. The following text appears:

```
Object |PATIENT RELIGION| is not active.
    .
    .
Calling text editor, please wait…

================[WRAP]==[INSERT]=< >===[<PF1>H=HELP]==================
Patient's religious preference: UNITARIAN; UNIVERSALIST.  Patient's home ad


======T======T======T======T======T======T=====T======T======T======T
```

12. This allows you to check out the formatting of the boilerplate text when the object is being used.

13. In this case the line continues beyond 80 characters—we haven't left enough room in the line for the object.

14. If there isn't enough room for the object data, or it doesn't print out in the right format, we change the Object Method and/or the Boilerplate text until it looks right.

15. Go into Boilerplate text and move the next sentence to the next line:

```
 =============[WRAP]==[INSERT]=< >===[<PF1>H=HELP]==================
Patient's religious preference |PATIENT RELIGION|.
Patient's home address:…

=======T=======T=======T=======T=====T=====T=====T=====T=====T=====T=====
```

Testing the More Realistic Object, cont'd

16. Exit the editor.
17. In the Boilerplate screen, use the TRY action again:

```
======[WRAP]==[INSERT]=< >===[<PF1>H=HELP]==================
Patient's religious preference: UNITARIAN; UNIVERSALIST.
Patient's home address: …

=====T=====T=====T=====T=====T=====T=====T=====T=====T=====T
```

This time the formatting looks fine.

We have tested the Object Method code, TRIED the object, and TRIED a title with the object in it.
Everything looks good, so we proceed to activate the object.

E. Activating the object:

1. Quit out of the Detailed Display screen.
2. In the Objects screen, select the Status action.
3. Select A for Active status:

```
Detailed Display            Mar 05, 1997 15:03:58        Page:   1 of   1
                       Object PATIENT RELIGION
_____
 Basics
            Name:   DEM PATIENT RELIGION
    Abbreviation:   RELI
     Print Name:    PATIENT RELIGION
           Type:    OBJECT
            IFN:    599
        National
        Standard:   NO
          Status:   INACTIVE
           Owner:   MCCLAN,MARGE

Technical Fields
        Object Method: S X=$$RELI^MYROUTIN (DFN)
          ? Help          +, - Next, Previous Screen       PS/PL
        Basics                  Try                 Delete
        Technical Fields        Find                Quit
Select Action: Quit// BA    Basics

NAME: DEM PATIENT RELIGION// <Enter>
ABBREVIATION: RELI// <Enter>
PRINT NAME: PATIENT RELIGION// <Enter>
PERSONAL OWNER: ME//  <Enter>
STATUS: (a/I): INACTIVE// A ACTIVE
```

Activating the object, cont'd

Activating an object communicates to users that it is ready for embedding in boilerplate text. It also causes the object to execute its object method code rather than to write an

inactive message when documents are entered on it through the regular options (as opposed to the action Try). If
the object TRY action had not been clean, we would not have been able to activate the object.

The Active object is now ready for entering documents. One last test, and we'll be done.

To enter documents (rather than just TRY them), the title also must have a status of Active or Test.

4. Quit out of the option *Create Objects* and
5. Go into the option *Create Document Definitions*.
6. Edit the status of the test title to Test.
7. Check to make sure that you own it.
8. Quit out of the Document Definition menu
9. Go into the Clinician menu.
10. Select *Entry of Progress Note* from the Clinician's Progress Notes Menu

```
--- Clinician's Progress Notes Menu ---

   1       Entry of Progress Note
   2       Review Progress Notes by Patient
   2b      Review Progress Notes
   3       All MY UNSIGNED Progress Notes
   4       Show Progress Notes Across Patients
   5       Progress Notes Print Options ...
   6       List Notes By Title
   7       Search by Patient AND Title
   8       Personal Preferences ...

Select Progress Notes User Menu Option: 1   Entry of Progress Note
```

F. Entering a Progress Note using the Object

1. Select a TEST PATIENT

2. Select the title:

```
Select PATIENT NAME: DOE,WILLIAM C.              09-12-44      243236572      YES
 SC VETERAN
            (2 notes)  C: 02/24/97 08:44
            (1 note )  W: 02/21/97 09:19
                       A: Known allergies
Available note(s):  11/07/96 thru 03/05/97  (23)
Do you wish to review any of these notes? NO// <Enter>
Personal PROGRESS NOTES Title List for ME

   1    CRISIS NOTE
   2    ADVANCE DIRECTIVE
   3    Other Title
TITLE:  (1-3): 1// 3
TITLE: CRISIS NOTE// DEMOGRAPHICS NOTE        TITLE
Creating new progress note...
          Patient Location:  2B
         Date/time of Visit:  04/18/96 10:00
          Date/time of Note:  NOW
             Author of Note:  MCMANN,MARGE
   ...OK? YES// <Enter>

Calling text editor, please wait...

=========[ WRAP ][ INSERT ]=< Patient: DOE,WILLIAM C. >[ <PF1>H=Help]=======
Patient's religious preference: UNITARIAN; UNIVERSALIST.
Patient's home address: …


T=======T=======T=======T=======T=======T=======T=======T=======T=======T
```

3. Exit your editor:

```
Saving text ...
No changes made...
```

4. Don't sign it. You'll want to delete it later since it's a test note:

```
Enter your Current Signature Code: <Enter>
NOT SIGNED.
Press RETURN to continue... <Enter>
Print this note? No// <Enter>  NO
You may enter another Progress Note. Press RETURN to exit.
Select PATIENT NAME: <Enter>
```

G. Troubleshooting:

If you have problems with this note:

- Make sure its status is Active or Test.
- If its status is Test, make sure you own it.
- Make sure the embedded object PATIENT RELIGION has an active status.

H. Using the Object

When the note works properly, the object is finished and available for any user with a Document Definition menu to embed it in boilerplate text. Unless you assign ownership to someone else, you are the site-wide caretaker for this object. Any questions or requests should be addressed to you.

I. Further considerations.

Using the option Sort Document Definitions to create Objects
Once you are comfortable creating objects, it is actually easier to use the option *Sort Document Definitions* than the option *Create Objects*. To use the Sort option, select ALL, and select a narrow alphabetic range which includes both the object name and the name of a test title. Another possibility is to enter yourself as the Personal Owner. This assumes you are the personal owner of both the object and test title. *Sort Document Definitions* permits the object to be edited and tested (except for the code itself) without switching options.

Activating/Inactivating/Editing Objects
Objects must be inactive before they can be edited. Before inactivating an object that has already been used in boilerplate text, you should inactivate all Titles which use it. This takes those titles offline for entering documents. If a title containing an inactive object is not offline and someone enters a document on it, the object will not function and the user will see an "Object Inactive" error message where the object data should appear.

Objects can be tested using the Try action when they are inactive, but must be activated before they will function for the option *Entry of Progress Note*. So, when you have finished editing an object, be sure to reactivate it.
Objects should not be activated until they have been thoroughly tested both by TRYing the object and by TRYing a test title with the object embedded in its boilerplate text.

Ownership of Objects
When creating a new object, make yourself an owner, at least until you have finished testing it. Only the owner can edit an object, even with the Manager menu.

Persons with the Manager menu are permitted to edit the owner of objects they don't own. This allows reassignment of object owner in those rare cases when reassignment is necessary. It should be done only by high-level managers. In general, users are expected to respect object ownership and edit only objects they own. If an object needs changing, contact its owner. When you own an object, you are caretaker of it for the entire site since it is available across the site for use in boilerplate text. Consult with all users before changing it.

Naming Objects
Although TIU doesn't enforce any rules regarding which name of the object to embed in boilerplate text, sites may want to maintain the convention of embedding print name or abbreviation only, leaving the .01 name to be a longer, technical, namespaced name. Then Print Name must be long enough to be unique, but otherwise as short as possible for typing convenience. Abbreviation is 2 to 4 letters.

Objects must always have uppercase names, abbreviations, and print names. When embedding objects in boilerplate text, users may embed any of these three (name, abbreviation, print name) in boilerplate text, enclosed by an "|" on both sides. Objects must always be embedded in uppercase.

As for namespacing, sites will want to share ideas among themselves as to what works best. Some possibilities are by service or product, like the Document Definition Hierarchy, and/or by the site where the object originated. Sites can post objects to share on SHOP,ALL

Creating more complex objects
For ideas on creating more complex, longer objects, look at the object methods of some other exported objects. Look at the associated routines. Copy an exported object, put a break in the copy's object method, embed the copy in a title and try the title.

Action Descriptions

Actions are not selectable when they are enclosed in parentheses.

 FIND
   Finds text in a list of entries/information displayed. The program
   searches all pages of list/information (except for unexpanded entries in
   the Edit Document Definitions Option). Can be a quick way to get to the
   right page. Enter F

 CHANGE VIEW
   Changes the view to a different list of Document Definitions.

 CREATE
   This action can be used to create either Objects or nonobject Document
   Definitions in TIU Document Definition file 8925.1. After it is created,
   a nonobject entry must be explicitly added as an Item to a parent in the
   hierarchy before it can be used. (The Create Document Definitions
   Option does this automatically.) File 8925.1 cannot have two entries of
   the same type with the same name.

 DETAILED DISPLAY
   Detailed Display displays the selected entry and permits edit if
   appropriate. Edit is limited if the entry is National. Shared Components
   can be VIEWED via the Edit Document Definitions Option but can be EDITED
   only via the Sort Option.
   The DETAILED DISPLAY action lets you edit all aspects of an entry,
   including Items. The Items action, in contrast, looks at the entry ONLY as
   an Item under its parent and permits edit of Item characteristics ONLY.
   Managers (anyone assigned the Manager menu) need not own the entry in
   order to edit it. You can edit Basics, Items, Boilerplate Text, Technical
   Fields and Upload Fields.

 TRY
  TRY examines the selected entry for basic problems.

  For titles and components with boilerplate text, this includes checking any
  Embedded objects to make sure the object is embedded correctly.
  If the entry is a title and checks out OK (or if its only problem is an inactive
  Object), you can test the boilerplate text by choosing a patient and entering
  A document using the entry. TRY doesn't require any particular status for the
  Title, since documents entered during the trial function even if inactive, in
  Order to permit testing of objects. (Ordinarily, object data are not retrieved
  Unless the object is active, so be sure to activate the object when it's ready
  For use.) Since the trial document shows up on Unsigned lists during the time
  It's being edited, we recommend that you select *test patients only.*

  If TRY is selected from the Boilerplate Text Screen, TRY shows which
  objects are badly embedded and why. Checks include whether the object as
  written exists in the file, whether it is active, whether it is split
  between lines, and whether the object as written is ambiguous as to which
  object is intended. If the entry is OK, you can enter a trial document.

For objects, TRY checks the object Name, Abbreviation and Print Name to make
sure they are not ambiguous. That is, it makes sure the utility can
decide which object to invoke when given the Name, Abbreviation, or Print
Name and that it does not get the wrong object. TRY checks that the
object has an Object Method, but does NOT check that the Object Method
functions correctly.

OWNER

You can select multiple entries and edit Owner, Personal and/or Class. To
change from Personal to Class Owner or vice versa, you must delete the
unwanted entry before you are prompted for the other.

COPY

Copy can be done from the *Edit Document Definitions* option or from the
Sort option, but not from the *Create Document Definitions* option. Titles,
Components, or Objects may be copied. Copy can be used to "jump start" new
entries by copying an old entry and then editing it.

Copy *could* be used to change the behavior of an entry (i.e. change the behavior
of the copy and inactivate the original), but most behavior can be edited even
when the entry is in use by documents. Edit is better than copy/inactivate since
it does not clutter up the hierarchy with inactive entries.

Copy can be used to "move" entries once they are in use by documents. (This is
not a true "move", but is the only possibility once an entry has been used by
documents. If the entry is not yet in use by documents, it is better to delete it
as an item from the old parent, and add it to the new parent, a true move).

The Copy action prompts for an entry to copy and a Name to copy into. This
name must be different from the name of the entry being copied. The
action then creates a new entry with the chosen name and copies the
fields in the Document Definition File 8925.1 into the new entry. The
copier is made the personal owner of the copy.

If the copying is being done through the *Edit Document Definitions* option,
the copy is then added as an item to the parent. If the copying is done
through the *Sort Document Definitions* option, the copy is NOT added as an
item to the parent. Since items must not be added to Active or Test
Titles, components of Active or Test Titles can only be copied through the
Sort option. Objects are copied from the Sort option or the Create Objects
option.

Several fields are NOT copied as is. If the original is a National Standard, the
entry may be copied, but the copy is not National Standard. If the original is
Shared, it may be copied but the copy is not Shared. The other exceptional field
is the Items field. If the entry has items, the action prompts for item names to
copy into, creates NEW entries for the items, and adds the NEW items to the copy.

Exception to the Items field Exception: if a nonshared entry has a Shared
item, the action does NOT copy the Shared item but merely adds the Shared
item to the copy. If the entry being copied is itself a Shared component,
the copy is not shared, and NEW items are added to the copy rather than
reusing shared items.

Action Descriptions, cont'd

```
     If the copying is being done through the Edit Document Definitions option,
     the user is asked which parent to add the copy to, and the copy is added
     as an item to this parent.  If the copy is a Title and the user has chosen
     a new parent rather than the same parent, the user is asked whether to
     activate the copy and inactivate the original.

     If the copying is done through the Sort Document Definitions option, the
     copy action does NOT add the copy to any parent.  Such orphan copies can
     be added to any parent using action Items for the parent.
     Objects are copied from the Sort Option or the Create Objects Option.
```
QUIT
```
     Allows you to quit the current menu level.
```

Exported Objects

ACTIVE MEDICATIONS
ALLERGIES/ADR
BLOOD PRESSURE
CURRENT ADMISSION
NOW
PATIENT AGE
PATIENT DATE OF BIRTH
PATIENT DATE OF DEATH
PATIENT HEIGHT
PATIENT NAME
PATIENT RACE
PATIENT SEX
PATIENT SSN
PATIENT WEIGHT
PULSE
RESPIRATION
TEMPERATURE
TODAY'S DATE
VISIT DATE

DOCUMENT TEMPLATES

Document templates let you quickly add commonly used text and TIU objects when writing or editing progress notes, completing consults, or writing discharge summaries.

The Template Editor, shown below, is used to set up personal, shared, and group templates. These types of templates are described in the following section.

Personal templates

Any user can create his or her own templates. You can copy and paste text into a template, type in new content, add TIU objects, or begin by copying a shared template and then modifying it as needed. Personal template and folder icons have a folded upper right corner.

Shared templates

Only members of the Clinical Coordinator ASU class can *create* shared templates. Shared templates are available to all users. Coordinators can copy and paste text into a template, type in new content, add TIU objects, or begin by copying a personal template and then modifying it as needed. In the tree view, shared template and folder icons do not have a folded corner.

☞ **NOTE:**   When you install CPRS, a copy of all your existing boilerplate titles is placed in the inactive boilerplates folder under shared templates.

Clinical coordinators can arrange the boilerplate titles copied into the shared templates to be used as templates, use them to create new templates, or make them available to users by moving them out of the inactive folder. Users will not see the inactive folder or its contents unless you choose to make the folder active.

(To see the boilerplates folder, go into the templates editor, make sure Edit Shared Templates is checked, uncheck Hide Inactive under shared templates, and click the plus sign beside the shared icon.)

Types of Templates

When you create templates, you can go directly into the template editor, type in text, and add TIU objects, or if you are in a document and type in something you will use repeatedly, you simply select that text, right-click, select Create New Template, and the editor comes up with the selected text in the editing area.

Shared templates, cont'd

You can create individual templates, group templates, or folders.

Templates contain text and TIU objects that you can place in a document.

Group templates contain text and TIU objects and can also contain other templates. If you place a group template in a document, all text and objects in the group template and all the templates it contains (unless they are excluded from the group template) will be placed in the document. You can also expand the view of the group template and place the individual templates it contains in a document one at a time.

Folders are like folders or directories in a file system. They are used to group and organize templates. You cannot place a folder in a document. It is there to hold templates and help in navigating the template tree view. For example, you might create a folder called "radiology" for templates, group templates, and other folders relating to radiology.

Arranging Templates for Ease of Use

How you arrange your templates depends on your specific needs. However, it may be useful to group similar templates together. You can also use folders to group similar templates, making them easier to find. This organization will be similar to a good directory structure for your workstation. For example, you may want to place all of the pulmonary templates together rather than alphabetizing templates.

By placing those templates together that you will use, you will spend less time moving around the tree to find the template you need.

Using Templates to Create Documents

Once you have created templates, adding them to a document is easy. When you create a new note, a Templates button (also called a "drawer") appears. When you click the button, it opens to show you the templates that are available. Group templates and folders have a plus next to them. Click the plus to expand the tree view and see the templates they contain. Click a minus sign to collapse the tree view, hiding the templates under that item.

When you find the object you want to place in a document, you can drag-and-drop it into the document, double-click it, or right-click and choose Insert Template. The text and objects will appear where the cursor was a few seconds later.

Searching for Templates

You can search for templates by the words in the template name. To search, right-click in the templates in the editor or in the templates "drawer" and choose Find Templates. A text field, Find button, and two find options check boxes appear. Enter the text you want to find and click Find.

Creating Personal Document Templates

To create a personal document template, follow these steps:

1. On the Notes, Consults, or D/C Summ tab, bring up the Template Editor by selecting Options | Create New Template

-or-

> To save specific text in a new note as a template, select the text, right-click on it, and select Copy into New Template.

2. In the Name field under Personal Template Properties, enter a name for the new template. Remember the template name requirements.
3. Click the template type: Template, Group Template, or Folder.
4. For Templates and Group Templates, enter the text and TIU objects (if desired) to create the content. you can enter content in these ways:

Copy and paste from other documents
> Type in text
> Insert TIU objects
> Copy a shared template

☞ **NOTE:**   After you enter the content, you can right-click in the Template Boilerplate area to select spell check or Check Boilerplate for Errors, which looks for invalid TIU objects.

5.   Find where you want to place the template in the tree view.

   a. Click the plus sign next to an item to see the objects under it.
   b. Drag-and-drop the template where you want it in the tree. (Or use arrows below the personal templates tree view.)

6.   To save the template, click Apply. To save and exit the editor, click OK.

Editing Document Templates

You can change your personal templates and members of the Clinical Coordinator ASU class can change shared templates at any time.

To edit a document template, follow these steps:

1. Click the Notes, Consults, or D/C Summ tab.
2. Select Options | Edit Templates (Option | Edit Shard Templates to edit shared)

-or-

If the Templates drawer (Notes tab) is open, right-click in the drawer, and select Edit Templates.

3. Find the template you want to edit.

    a. Click the plus sign next to an item to see the objects under it.
    b. Click the template you want to edit.

4. Make any desired changes, like these:

    -   Type in more text.
    -   Add TIU objects.
    -   Change the template name.
    -   Move the template to a different location.
    -   Make the template inactive if you don't want it seen in the template drawer.
    -   If part of a group template, exclude it to make it not copy into a document when the group icon is dragged-and-dropped or double-clicked. Or, if excluded, you can click the check box to include it again.
    -   Change the template type (template, group template)

☞ **NOTE:** If you change from a template or group template to a folder, you will lose the text in the template.

5. To spell check or Check Boilerplate for Errors, right-click in the Boilerplate Template area and select the appropriate option.
6. When finished, click Apply to save or click OK to save and exit the editor.

Creating Shared Document Templates

To create shared document templates, you must be a belong to the Clinical Coordinator ASU class. You can then create templates containing text and TIU objects that will be available to all users.

To create shared templates, follow these steps:

1. Click the Notes, Consults, or D/C Summary tab.
2. Select Options | Create New Shared Template to bring up the Template Editor.

A template called "New Template" is created under Shared Templates..

3. In the Name field under Shared Template Properties, enter a name for the new template. Remember the template name requirements.
4. Click the template type: Template, Group Template, or folder. If you choose Folder, skip to step 6.
5. For templates and Group Templates, enter the text and TIU objects (if desired) to create the content. you can enter content in these ways:

Copy and paste from other documents
- Type in text
- Insert TIU objects
- Copy one of your personal templates

☞ **NOTE:** After you enter the content, you can right-click in the Template Boilerplate area to select spell check or Check Boilerplate for Errors, which looks for invalid TIU objects.

6. Find where you want to place the template in the tree view.

   a. Click the plus sign next to an item to see the objects under it.
   b. Drag-and-drop the template where you want it in the tree. (Or use arrows below the personal templates tree view.)

7. To save the template, click Apply. To save and exit the editor, click OK.

☞ **NOTE:** You do not have to click Apply after each template, but it is recommended because if you click Cancel, you will lose all changes you have made since the last time you clicked Apply or OK.

Copying Document Templates

Users can copy a shared template into their personal templates. Clinical Coordinators can copy personal templates into the shared templates also. In addition, you can also copy a template and paste it elsewhere in the same personal or shared tree (hierarchy). Instructions for copying templates within a tree

To copy a shared template into personal, use these steps:

1. Click the Notes, Consults, or D/C Summ tab.
2. Select Options | Edit Templates

-or-

If the Templates "drawer" (Notes tab) is open, right-click in the drawer, and select Edit Templates.

3. Expand the personal template tree to show find where you will paste the shared template.

    a. Click the plus sign next to an item to see the objects under it.
    b. Continue until you find the right location.
    c. Click the template under which you want the shared template.

4. Find the shared template you want to copy.

    a. In the shared templates, click the plus sign next to items to see the objects under them.
    b. Click the template you want to copy.

5. Click the arrow button between the trees, double-click the shared template, or drag-and-drop the shared template to the chosen location.

☞ **NOTE:** At this point, the template is still a shared template. Changes to the original shared template will appear in your version also, which may be desirable. But if you change your version in any way, it becomes a personal template, the icon will have a folded corner and changes to the original will not affect your version.

6. To save the template, click Apply. To save and exit the editor, click OK.

USER CLASS SETUP

Automatic population of Provider Class
The option *Initialize Membership of User Classes* on the IRM Conversion Menu populates the Provider Class for operation of clinical applications, based on membership in the Provider File. (The option starts a routine called USRPROV.) You especially need to run this routine to implement Discharge Summary because you have to be a provider to sign a discharge summary. Since *all* holders of the provider key will be added to the ASU Provider Class, you need to review holders of the key before running the routine. It should be run only when first implementing ASU.

Required User Classes

The following User Classes and sub-classes under Provider *must* be set up:

MIS	Provider
Chief, MIS	Physician
Medical Record Technician	Nurse
Transcriptionist	Resident
	Intern
	Medical Student
	Nurse Practitioner
	Physician Assistant

Other User Classes and sub-classes can be added later, as necessary. **Keep it simple.**

Steps to set up User Classes

1. Identify Medical Center staff who will be using Progress Notes and Discharge Summaries through TIU.

   You can either work with the various Services or Product Line ADPACs or coordinators to provide names and roles, or you can work through VA FileMan to search the New Person File (or a combination).

   If necessary, print the New Person file and look at titles. This is the long and complicated way to identify staff. Frequently different names are used for the same positions. We recommend working with the Services. Maybe they already have something online that is kept updated (especially for rotating medical students, interns, and residents) that can be used for ASU to keep it current.

   To identify the users who should be allocated to the CHIEF, MIS and MEDICAL RECORD TECHNICIAN classes, get a list of MRTs and transcriptionists from the HIMS office.

2. Review the list of imported User Classes.

4. Decide how to categorize your list of staff by User Classes and sub-classes. The Authorization/Subscription Utility (ASU) lets you define, populate, and retrieve information about User Classes (which can be defined hospital-wide or more narrowly for a specific service). It can be used across V*IST*A to replace and/or complement keys. You can link User Classes with TIU Document Definitions and document actions. CPRS actions such as ordering or signing can be linked with Document or Order type (e.g., Clinical Warning Note) and with User Classes (e.g., Provider Class). User Classes may be active or inactive.

The TIU/ASU installation automatically stuffs Clinical Coordinator as the CLASS OWNER for Progress Notes Titles.

Initialize Membership of User Classes
The option, *Initialize Membership of User Classes* [USR INITALIZE MEMBERSHIP] automatically populates the User Class Membership file (USRPROV) with the Provider User Class, based on membership in the Provider file. It should only be run when first implementing ASU. The option excludes terminated users and users whose names begin with "ZZ."

Keep it Simple
We recommend that you start off by populating only the most essential User Classes (i.e., Provider; MRT; Chief, MIS; and Transcriptionist), and work with the exported classes and business rules. You may need to add a few people who weren't in classes that were converted, or add a few classes/subclasses to match your hospital's organization. As you gain experience using ASU, you may want to modify the class structure some. **Don't make it more complicated or restrictive than necessary.**

User Class Management Menu

Option	Option Name	Description
User Class Definition	USR CLASS DEFINITION	This option allows review, addition, editing, and removal of User Classes.
List Membership by User	USR LIST MEMBERSHIP BY USER	This option allows review, addition, editing, and removal of individual members to and from User Classes.
List Membership by Class	USR LIST MEMBERSHIP BY CLASS	This option allows review, addition, editing, and removal of individual members to and from User Classes.
Manage Business Rules	USR BUSINESS RULE MANAGE-MENT	This option allows you to list the Business rules defined by ASU, and to add, edit, or delete them, as appropriate.

Process for creating user classes:

A. Populate the Provider User Class with *Initialize Membership of User Classes*.
B. Edit and Define User Classes.
C. Add members to User Classes.
D. Modify (add or delete) User Classes and their members, as needed.

Detailed instructions are provided on the following pages.

How to Set Up User Classes

A. Populate the Provider Class

Initialize Membership of User Classes populates the User Class Membership file (USRPROV) with the Provider User Class, based on membership in the Provider file. It should be run ONCE when first implementing ASU.

```
Select TIU Menu Option: IRM Conversion Menu

  1. Convert Discharge Summaries [TIU DISCHARGE SUMMARY CONVERT]
  2. Convert Progress Notes Menu [TIIU PROGRESS NOTES CONVERT MENU]
  3. Initialize Membership of User Classes [USR INITIALIZE MEMBERSHIP]

Select TIU Conversion Menu Option: 3  Initialize Membership of User
Classes
```

B. Edit and define user classes

1. Prepare a list of all users and their roles. Get the help of various clinical services or product line coordinators.

2. Make sure they're in the New Person File (VA 200).

3. Look at the exported User Classes (use the option *User Class Definition* on the User Class Management Menu) to see which classes are available. Expand the classes to see sub-classes.

4. If you need new User Classes, you may create them with this option.

5. Determine who belongs in what category.

6. A user may belong to more than one category. Persons wearing several different hats can have more than one entry in the file. For example, Smith might be a dietitian also working toward a nursing degree. Smith could be entered twice, once as a Dietitian and once as a Student Nurse.

7. Since user class membership includes members of all subclasses, users should be made members of the most discrete class in a hierarchy of classes. For example, if Jones is a dentist, Jones should be entered into the Dentist class. Since Dentist is a subclass of the Provider class, Jones is then automatically a Provider, and will "inherit" any of the authorizations granted to Providers.

User Class Definition

This option allows you to review, add, edit, and remove User Classes. Follow the steps below to review current User Classes and to create new ones.

1. After you select the *User Class Definition* option, enter the User Class Status: Active, Inactive, or both.

```
User Class Definition
Select User Class Management Option: 1  User Class Definition
Select User Class Status: ACTIVE// ?
     Active                 All User Classes
     Inactive
Enter selection(s) by typing the name(s), number(s), or
abbreviation(s). Active
       Start With Class: FIRST// Provider
            Go To Class: LAST// Provider
Searching for the User Classes....
```

2. To see sub-classes of the classes shown on this screen, enter a class name at the prompt Start with Class: FIRST//. Then after the screen displays the class name, choose the action Expand/Collapse Tree. You will then see a screen of the hierarchy below the chosen class (e.g., physician).

```
User Classes          Jan 31, 1997 13:41:40       Page:   1 of   1
                      ACTIVE USER CLASSES                1 Classes
     Class Name                                   Abbrev
1    Provider ...                                 PROV      Active




          + Next Screen  - Prev Screen  ?? More Actions
     Find                      Expand/Collapse Tree     Change View
     Create a Class            List Members             Quit
     Edit User Class
Select Action: Quit// EX

Expanding User Class Hierarchy.
```

User Class Definition cont'd

```
User Classes              Jan 31, 1997 13:42:32     Page:   1 of   6
                           ACTIVE USER CLASSES                   1 Classes
     Class Name                                      Abbrev
1    Provider                                        PROV         Active
    |-Nurse
    | |-Nurse Anesthetist
    | |-Nurse Clinical Specialist
    | |-Nurse Epidemiologist
    | |-Nurse Practitioner
    | |-Nursing Continuing Care
    | |-Nursing Supervisor
    | |-Head Nurse
    | |-Vascular Nurse
    | |-Research Nurse
    | |-Nurse - Licensed Practical
    | |_Staff Nurse
    |-Physician Assistant
    |-Dentist
+          + Next Screen  - Prev Screen  ?? More Actions
     Find                      Expand/Collapse Tree     Change View
     Create a Class            List Members             Quit
     Edit User Class
Select Action: Next Screen// C  Create a Class
```

3. Select the action Create a Class and enter a new User Class or sub-Class name.

C. Add members to user classes

List Membership by User

> This option lets you enter a user name and the program will identify what User Class he or she is in. You can then add, edit, or remove individual members to that class.

1. Select *List Membership by User* from the User Class Management menu, and then enter the name of a user.

```
Select User Class Management Option: 2  List Membership by
User
Select USER:  ruell,JOE          JER
Searching for the User Classes.
```

List Membership by User, cont'd

2. A screen is displayed showing the User Class the designated user belongs to. Select the action Add, and enter other classes to which this user may belong.

```
Current User Classes  Jan 18, 1996 13:48:53    Page: 1 of  1
                        Joe E. Ruell                         1 Class
     User Class                             Effective  Expires
1    Staff Physician



          + Next Screen  - Prev Screen  ?? More Actions
     Add                            Remove
     Edit                           Change View
Select Action: Quit// Add
```

D. Modify user classes and their members, as needed

List Membership by Class

This option lets you select a User Class to review members. You can then add, edit, or remove individual members to and from the Class.

1. Select *List Membership by Class* from the User Class Management menu, and then enter the name of a class.

```
Select User Class Management Option: 3  List Membership by
Class
Select CLASS:  PHYSICIAN
Searching for the User Classes.
```

List Membership by User, cont'd

2. A screen is displayed showing the User Class and current members in it. Select the action Add, and enter other names to this class. You can also schedule changes for rotating residents, interns, and medical students.

```
User Class Members       Jan 18, 1996 13:51:09   Page: 1 of  1
                          PHYSICIANs                      6 Members
     Member                              Effective    Expires
1    BEN CARVER                                       06/01/95
2    Marcie J. Craven                    11/02/95     01/01/99
3    HENRY CUTTER
4    DOOGEY HOWSER
5    DOOBIE RICE
6    Joe E. Ruell




       + Next Screen  - Prev Screen  ?? More Actions        >>>
     Add                   Remove              Change View
     Edit                  Schedule Changes
Select Action: Quit//
```

Example: Adding MRTs and HIMS

1. To identify the users who should be allocated to the CHIEF, HIMS and MEDICAL RECORD TECHNICIAN classes, get a list of MRTs and transcriptionists from the HIMS office.

```
Select TIU Maintenance Menu Option: 3  User Class Management
              --- User Class Management Menu ---
   1      User Class Definition
   2      List Membership by User
   3      List Membership by Class
   4      Edit Business Rules
   5      Manage Business Rules

Select User Class Management Option: 3  List Membership by Class
Select CLASS: MRT  MEDICAL RECORDS TECHNICIAN
Searching for the User Classes.
```

```
User Class Members        Jun 14, 1996 14:21:31     Page:   1 of   1
                  MEDICAL RECORDS TECHNICIANs              0 Members
Member                                           Effective  Expires
No MEDICAL RECORDS TECHNICIANs found




      + Next Screen  - Prev Screen  ?? More Actions           >>>
    Add                      Remove                  Change View
    Edit                     Schedule Changes        Quit
Select Action: Quit// AD   Add
```

```
Select MEMBER: DENINGER,JOY C.        DCJ   274   MEDICAL RECORD
TECHNICIAN
MEMBER: DENINGER,JOY C.//  <Enter>
EFFECTIVE DATE: T  (JUN 14, 1996)
EXPIRATION DATE:  <Enter>
Rebuilding membership list.
```

```
User Class Members        Jun 14, 1996 14:21:53     Page:  1 of    1
                  MEDICAL RECORDS TECHNICIANs              1 Member
    Member                                       Effective  Expires
    JOY C. DENINGER                              06/14/96


         ** JOY C. DENINGER Added **                         >>>
Jun 14, 1996 14:21:53_8
    Add                      Remove                  Change View
    Edit                     Schedule Changes        Quit
Select Action: Quit// A   Add
```

Example: Adding MRTs and MIS, cont'd

```
Select MEMBER: DUNCAN,CORRINE K.          DKC     828      MEDICAL RECORD
TECHNICIAN
MEMBER: DUNCAN,CORRINE K.//  <Enter>
EFFECTIVE DATE: T  (JUN 14, 1996)
EXPIRATION DATE:  <Enter>
 Rebuilding membership list.
```

2.   Add all MRTs on the list, then change view to add the Chief of MIS.

```
User Class Members          Jun 14, 1996 14:24:11    Page:    1 of    1
                    MEDICAL RECORDS TECHNICIANs                 7 Members
Member                                              Effective  Expires
1    JOY C. DENINGER                                06/14/96
2    CORRINE K. DUNCAN                              06/14/96
3    IRMA W. GRIMES                                 06/14/96
4    HARIETT A. MEICK                               06/14/96
5    MORTON,CYNTHIA Z.                              06/14/96
6    TAMMY H. POWELSON                              06/14/96
7    ABIGALE N. QUIGLEY                             06/14/96
          ** ABIGALE N. QUIGLEY Added **                        >>>
Jun 14, 1996 14:24:11_8
     Add                     Remove                  Change View
     Edit                    Schedule Changes        Quit
Select Action: Quit// CH   Change View
```

```
Select CLASS: CHIEF
     1    CHIEF
     2    CHIEF (ACTING)
     3    CHIEF OF STAFF
     4    CHIEF RESIDENT
     5    CHIEF TECHNOLOGIST
     6    CHIEF, ANESTHESIOLOGY SERVICE
     7    CHIEF, MEDICAL SERVICE
     8    CHIEF, HIMS
     9    CHIEF, PSYCHIATRY SERVICE
TYPE '^' TO STOP, OR
CHOOSE 1-9: 8
Searching for the User Classes.
```

Example: Adding MRTs and MIS, cont'd

```
User Class Members      Jun 14, 1996 14:24:24      Page:   1 of   1
                        CHIEF, HIMS                         0 Members
Member                                              Effective  Expires
No CHIEF, HIMS found




         + Next Screen  - Prev Screen  ?? More Actions           >>>
      Add                    Remove                  Change View
      Edit                   Schedule Changes        Quit
Select Action: Quit// AD   Add
```

```
Select MEMBER: SNANDERS,LORAINE P.      SPL    364    CHIEF MIS
MEMBER: SANDERS,LORAINE P.// <Enter>
EFFECTIVE DATE: T  (JUN 14, 1996)
EXPIRATION DATE:
Rebuilding membership list.
```

Exported User Classes

ACTING ASSISTANT CHIEF
ACTING CHIEF
ADDICTION MEDICINE
ADJUDICATION OFFICER
ALLERGIST
ALLERGY & IMMUNOLOGY
ALLERGY & IMMUNOLOGY: CLINICAL & LABORATORY
ANCILLARY TESTING
ANESTHESIOLOGIST
ANESTHESIOLOGIST - CRITICAL CARE
ANESTHESIOLOGIST - PAIN MANAGEMENT
ASSISTANT CHIEF
ASSISTANT CHIEF OF STAFF
ASSOCIATE CHIEF OF STAFF
ATTENDING PHYSICIAN
AUDIOLOGIST
AUDIOVISUAL SPECIALIST
BODY IMAGING
CARDIOLOGIST
CAST TECHNICIAN
CHAPLAIN
CHIEF
CHIEF RESIDENT
CHIEF TECHNOLOGIST
CHIEF, ANESTHESIOLOGY SERVICE
CHIEF, MEDICAL SERVICE
CHIEF, MIS
CHIEF, PSYCHIATRY SERVICE
CHIEF, RESEARCH SERVICE
CHIEF, SURGICAL SERVICE
CLINICAL CLERK
CLINICAL COORDINATOR
CLINICAL DIETITIAN
CLINICAL INTERN
CLINICAL PHARMACIST
CLINICAL SERVICE CHIEF
CLINICAL SPECIALIST
CONSULT/LIAISON
CONSULTANT
COORDINATOR, OPERATING ROOM
COORDINATOR, QM/MIS
COUNSELOR
CYTOTECHNOLOGIST
DENTAL ASSISTANT
DENTAL INTERN
DENTAL RESIDENT
DENTIST
DERMATOLOGIST

Exported User Classes cont'd

DERMATOLOGIST: CLINICAL & LABORATORY
DERMATOLOGY FELLOW
DERMATOPATHOLOGIST
DIABETES STUDY NURSE
DIALYSIS TECHNICIAN
DIETETIC INTERN
DIETETIC TECHNICIAN STUDENT
DIETITIAN
DIETITIAN CLINICAL SPECIALIST
DISTINGUISHED PHYSICIAN
DRG COORDINATOR
ECHO TECHNICIAN
EDUCATION STAFF SPECIALIST
ELECTRON MICROSCOPIST
EMERGENCY MEDICINE PHYSICIAN
EMERGENCY SPORTS MEDICINE
EMG TECHNICIAN
ENDOCRINOLOGIST
EPIDEMIOLOGIST
EXERCISE PHYSIOLOGIST
FAMILY GERIATRICIAN
FAMILY PRACTICE PHYSICIAN
FAMILY SPORTS MEDICINE
FEE BASIS NURSE
FELLOW
GENERAL PRACTICE PHYSICIAN
GENERIC SCREENING NURSE
GERIATRICS, GENERAL PRACTITIONER
GRADUATE NURSE TECHNICIAN
GYNECOLOGIST
HEAD NURSE
HEALTH CARE TECHNICIANS
HEMATOLOGY & ONCOLOGY
HEMODIALYSIS TECHNICIAN
HISTOPATHOLOGY TECHNICIAN
HISTOTECHNOLOGIST
HIV/AIDS COORDINATOR
HOME CARE CLINICAL COORDINATOR
HOSPITAL EPIDEMIOLOGIST
HYGIENIST
IMAGE ASSISTANT
INDUSTRIAL HYGIENIST
INFECTION CONTROL NURSE
INFECTIOUS DISEASE FELLOW
INPATIENT PSYCHOLOGIST
INTERN
INTERN PHYSICIAN
INTERN: ALLOPATHIC

Exported User Classes cont'd

INTERN: OSTEOPATHIC
IV PHARMACIST
IV TECHNICIAN
JUNIOR ASSISTANT RESIDENT
JUNIOR RESIDENT
KINESIOTHERAPIST
LABORATORY PATHOLOGIST
LABORATORY PROGRAM ASSISTANT
LABORATORY TECHNICIAN
LEAD PHARMACIST
MEDICAL CLERK
MEDICAL CLERK SUPERVISOR
MEDICAL DATA CLERK
MEDICAL INFORMATION SECTION
MEDICAL INTERN
MEDICAL PROGRAM ASSISTANT
MEDICAL RECORD SUPERVISOR
MEDICAL RECORDS TECHNICIAN
MEDICAL STUDENT
MEDICAL STUDENT III
MEDICAL STUDENT IV
MEDICAL TECHNICIAN
MEDICAL TECHNOLOGIST
MEDICAL TECHNOLOGY STUDENT
MEDICAL TOXICOLOGIST
MIS FILE CLERK
NARCOTIC TECHNICIAN
NEUROLOGY PROGRAM CLERK
NEUROLOGY RESIDENT
NEUROLOGY TECHNICIAN
NUCLEAR CARDIOLOGY
NUCLEAR CARDIOLOGY DIRECTOR
NUCLEAR MEDICINE TECHNICIAN
NURSE
NURSE - STUDENT
NURSE ANESTHETIST
NURSE CLINICAL SPECIALIST
NURSE EPIDEMIOLOGIST
NURSE LICENSED PRACTICAL
NURSE PRACTITIONER
NURSING ASSISTANT
NURSING CLERK TYPIST
NURSING CONTINUING CARE
NURSING SUPERVISOR
NUTRITION CLINIC DIETITIAN
NUTRITION SUPPORT NURSE
OCCUPATIONAL THERAPIST
OCCUPATIONAL THERAPY ASSISTANT
OCCUPATIONAL THERAPY STUDENT

Exported User Classes cont'd

OCCURRENCE SCREENING
ONCOLOGY NURSE
OPC SCHEDULING SUPERVISOR
OPERATING ROOM COORDINATOR
OPERATING ROOM TECHNICIAN
OPHTHALMOLOGIST
OPTOMETRIST
ORAL SURGERY RESIDENT
ORTHOTIST/PROSTHETIST
OTOLARYNGOLOGY
OUTPATIENT CLINIC
OUTPATIENT CLINIC SUPERVISOR
OUTPATIENT PSYCHOLOGIST
OUTPATIENT RX SUPERVISOR
OUTPATIENT TECHNICIAN
PATHOLOGIST
PATHOLOGY RESIDENT
PEDIATRIC EMERGENCY PHYSICIAN
PHARMACIST
PHARMACY COORDINATOR
PHARMACY MEDICAL CLERK
PHARMACY STUDENT
PHARMACY SUPERVISOR
PHARMACY TECHNICIAN
PHARMACY TRAINEE
PHLEBOTOMIST
PHYSICAL THERAPIST
PHYSICAL THERAPY AID
PHYSICIAN
PHYSICIAN ASSISTANT
PHYSICIST
PODIATRIST
POST GRADUATE YEAR 1 RESIDENT
POST GRADUATE YEAR 2 RESIDENT
POST GRADUATE YEAR 3 RESIDENT
POST GRADUATE YEAR 4 RESIDENT
PRIVACY ACT OFFICER
PROCTOLOGIST
PROSTHETIC REPRESENTATIVE TRAINEE
PROSTHETICS
PROSTHETICS CLERK
PROSTHETICS REPRESENTATIVE
PROVIDER
PSYCHIATRIC RESEARCH ASSISTANT
PSYCHIATRIST
PSYCHIATRY CLERK
PSYCHIATRY PROGRAM ASSISTANT
PSYCHIATRY RESIDENT
PSYCHOLOGY CLINICAL ASSOCIATE

Exported User Classes cont'd

PSYCHOLOGY INTERN
PSYCHOLOGY PROGRAM CLERK
PSYCHOLOGY REHABILITATION TECHNICIAN
PSYCHOLOGY RESEARCH
PSYCHOLOGY VOCATIONAL REHAB SPEC
PULMONARY CHIEF
PULMONARY CLINICAL SPECIALIST
PULMONARY FELLOW
PULMONARY FUNCTION TECH
PULMONARY LAB SUPERVISOR
PULMONARY STAFF CHIEF OF STAFF
PULMONARY TECHNICIAN
RADIATION DIAGNOSTIC TECHNOLOGIST
RADIATION ONCOLOGIST
RADIATION THERAPY TECHNOLOGIST
RADIOGRAPHER
RADIOLOGIST
RADIOLOGY DIAGNOSTIC TECH
RADIOLOGY FILE ROOM SUPERVISOR
RADIOLOGY RESIDENT
RADIOLOGY TECHNICIAN
RADIOLOGY TRANSCRIPTIONIST
RECREATION THERAPIST
RECREATIONAL THERAPY ASSISTANT
REMOTE USER
RENAL FELLOW
RESEARCH NURSE
RESEARCH TECHNICIAN
RESEARCH TECHNOLOGIST
RESIDENT PHYSICIAN
RESPIRATORY THERAPIST
SECTION CHIEF
SENIOR ASSISTANT RESIDENT
SENIOR RESIDENT
SOCIAL WORK ASSOCIATE
SOCIAL WORK INTERN
SOCIAL WORK SECRETARY
SOCIAL WORKER
SOCIAL WORKER SUPERVISOR
SOLUTIONS TECHNICIAN
SPECIAL PROCEDURES
SPEECH PATHOLOGIST
SPEECH PATHOLOGY SECTION CHIEF
STAFF DENTIST
STAFF INTERNIST
STAFF NURSE
STAFF PATHOLOGIST
STAFF PHARMACIST

Exported User Classes cont'd

STAFF PHYSICIAN
STAFF PSYCHIATRIST
STAFF PSYCHOLOGIST
STAFF RADIOLOGIST
STAFF SOCIAL WORKER
STAFF SURGEON
STUDENT
STUDENT RADIOGRAPHER
SUB-INTERN
SUPERVISOR
SUPERVISOR, BLOOD BANK
SUPERVISOR, C&P UNIT
SUPERVISOR, EVENING LABS
SUPERVISOR, HEMATOLOGY LAB
SUPERVISOR, IMMUNOLOGY LAB
SUPERVISOR, MICROBIOLOGY LAB
SUPERVISOR, MIS
SUPERVISOR, PULMONARY FUNCTION LAB
SUPERVISOR, SPECIAL CHEM LAB
SUPERVISOR, STAT CHEM LAB
SUPERVISORY BIOCHEMIST
SUPERVISORY IMMUNOLOGIST
SUPERVISORY MICROBIOLOGIST
SUPERVISORY PHARMACIST
TRANSCRIPTIONIST
TUMOR REGISTRAR
UNIT COORDINATOR
UNIT NURSE
UNIT TEACHER
USER
VASCULAR NURSE
VETERINARIAN MEDICAL OFFICER
VOCATIONAL REHABILITATION SPECIALIST

Define Business Rules

Business Rules in ASU authorize specific users or groups of users to perform specified actions on documents in particular statuses.

Examples:

- A completed (CLASS) Clinical Document may be viewed by a User
- An unsigned (CLASS) Clinical Document may be edited by a provider who is also the expected signer of the note
- An unsigned (CLASS) Clinical Document may be deleted by Chief, MIS

A list of the Business Rules exported with TIU/ASU follows this section.

Manage Business Rules

This option allows you to display all the Business rules for a given Document Definition, User Class, or User Role. You can then add, edit, or delete Rules, as appropriate. (This option is also known as the ASU Rule Browser, because you can browse back and forth among existing Business Rules, by various criteria.)

Example 1: Adding a new Business Rule

1. In this example we'll create a new Business Rule: "An UNCOSIGNED CLINICAL
    DOCUMENT may be SENT BACK by a PROVIDER who is also an EXPECTED
    COSIGNER."

```
Select User Class Management Option: 5  Manage Business Rules
Select SEARCH CATEGORY: DOCUMENT DEFINITION// ??

Choose from:
   DOCUMENT DEFINITION
   USER CLASS
   USER ROLE

Select SEARCH CATEGORY: DOCUMENT DEFINITION// <Enter>
Select DOCUMENT DEFINITION: ??

Choose from:
   ADVANCE DIRECTIVE       TITLE
   ADVANCE DIRECTIVE       DOCUMENT CLASS
   ADVERSE REACTION/ALLERGY       TITLE
   ADVERSE REACTION/ALLERGY       DOCUMENT CLASS
   CLINICAL DOCUMENTS      CLASS
   CLINICAL WARNING       TITLE
   CLINICAL WARNING      DOCUMENT CLASS
   CRISIS NOTE      TITLE
   CRISIS NOTE      DOCUMENT CLASS
   DISCHARGE SUMMARIES      DOCUMENT CLASS
   DISCHARGE SUMMARY       TITLE
   DISCHARGE SUMMARY      CLASS
   PROGRESS NOTES      CLASS
Select DOCUMENT DEFINITION: Clinical Documents  (CLASS)
```

Manage Business Rules, cont'd

2. After you specify the search category and document definition, all rules for that definition are displayed.

```
ASU Rule Browser             Jan 09, 1997 15:12:34    Page:  1 of   4
                        List Business Rules by DOCUMENT        40 Rules
                             for CLINICAL DOCUMENTS
                                                                    _
1    An UNTRANSCRIBED CLINICAL DOCUMENT may be entered by A USER
2    An UNRELEASED CLINICAL DOCUMENT may be RELEASEED by AN TRANSCRIBER
3    An UNSIGNED CLINICAL DOCUMENT may be EDITED by AN AUTHOR/DICTATOR
4    An UNSIGNED CLINICAL DOCUMENT may be EDITED by AN EXPECTED SIGNER
5    An UNSIGNED CLINICAL DOCUMENT may be SIGNED by AN EXPECTED SIGNER
6    An UNSIGNED CLINICAL DOCUMENT may be SIGNED by A PROVIDER who is also
     AN EXPECTED COSIGNER
7    A COMPLETED CLINICAL DOCUMENT may be VIEWED by A USER
8    An UNRELEASED CLINICAL DOCUMENT may be EDITED by AN TRANSCRIBER
9    An UNRELEASED CLINICAL DOCUMENT may be EDITED by A TRANSCRIPTIONIST
10   An UNCOSIGNED CLINICAL DOCUMENT may be COSIGNED by AN EXPECTED
     COSIGNER
11   An UNSIGNED CLINICAL DOCUMENT may be SIGNED by A STUDENT who is also
     AN EXPECTED SIGNER
12   An UNSIGNED CLINICAL DOCUMENT may be EDITED by AN EXPECTED COSIGNER
+          + Next Screen  - Prev Screen  ?? More Actions
   Find                  Edit Rule              Change View
   Add Rule              Delete Rule            Quit
Select Action: Next Screen// a   Add Rule
```

```
Please Enter a New Business Rule:

Select DOCUMENT DEFINITION: **??**
Choose from:
   ADVANCE DIRECTIVE       TITLE
   ADVANCE DIRECTIVE       DOCUMENT CLASS
   ADVERSE REACTION/ALLERGY      TITLE
   ADVERSE REACTION/ALLERGY      DOCUMENT CLASS
   BOIL MARCIE MN      TITLE
   CLINICAL DOCUMENTS      CLASS
   CLINICAL WARNING       TITLE
   CLINICAL WARNING      DOCUMENT CLASS
   CRISIS NOTE      TITLE
   CRISIS NOTE      DOCUMENT CLASS
   DISCHARGE SUMMARIES      DOCUMENT CLASS
   DISCHARGE SUMMARY      TITLE
   DISCHARGE SUMMARY      CLASS
   MINN MARCIE      DOCUMENT CLASS
   PROGRESS NOTES      CLASS
   RNOTE      DOCUMENT CLASS

Select DOCUMENT DEFINITION: **CLINICAL DOCUMENTS**
DOCUMENT DEFINITION: CLINICAL DOCUMENTS// **<Enter>**

STATUS: STATUS: **??**
 Choose from:
   AMENDED
   COMPLETED
   DELETED
```

```
   PURGED
   UNCOSIGNED
   UNDICTATED
   UNRELEASED
   UNSIGNED
   UNTRANSCRIBED
   UNVERIFIED
STATUS: UNCOSIGNED
ACTION: ??
     This is the action to be permitted for a given document definition
     and status.
Choose from:
   AMENDMENT
   COPY RECORD
   COSIGNATURE
   DELETE RECORD
   DICTATION
   EDIT DOCUMENT DEFINITION
   EDIT RECORD
   ENTRY
   MAKE ADDENDUM
   PRINT RECORD
   RELEASE FROM TRANSCRIPTION
   SEND BACK
   SIGNATURE
   VERIFICATION
   VIEW
ACTION: SEND BACK
USER CLASS: PROVIDER
AND FLAG: ??
This field allows the ADPAC to indicate whether the conditions specified by
User Class and User Role should be logically "AND'ed," or logically
"OR'ed," as they will be unless otherwise specified.  i.e., if you want to
specify that an unsigned discharge summary may be signed by a user, where:
     User Class = Provider AND User Role = Author,
   then you'll want to set this field to AND.
    Choose from:
      &         AND
      !         OR
AND FLAG: &  AND
USER ROLE: ??
This identifies the role of the user with respect to the document in
question (e.g., Author/Dictator, Expected Signer, Expected Cosigner,
Attending Physician, etc.).
Choose from:
   ADDITIONAL SIGNER
   ATTENDING PHYSICIAN
   AUTHOR/DICTATOR
   EXPECTED COSIGNER
   EXPECTED SIGNER
   SURROGATE
   TRANSCRIBER
```

Manage Business Rules option cont'd

```
USER ROLE: EXPECTED COSIGNER
DESCRIPTION:
  1> <Enter>
```

```
ASU Rule Browser              Jan 09, 1997 17:35:52      Page:  1 of   1
                     List Business Rules by DOCUMENT            2 Rules
                         for CLINICAL DOCUMENTS

1     An UNTRANSCRIBED CLINICAL DOCUMENT may be ENTERED by A NURSE
2     An UNCOSIGNED CLINICAL DOCUMENT may be SENT BACK by a PROVIDER
      who is also an EXPECTED COSIGNER




                    ** Item 2 Added **
   Find                    Edit Rule                 Change View
   Add Rule                Delete Rule               Quit
Select Action: Quit//
```

Example 2: Manage Business Rules

In this example, we will view business rules by User Class with Nurse as the User Class. We'll start to delete a rule, then decide to edit it instead.

1. Choose *Manage Business Rules* from the User Class Management menu. Then select User Class for the search category and nurse for the user class.

```
Select User Class Management Option: 5  Manage Business Rules
Select SEARCH CATEGORY: DOCUMENT// USER CLASS
Select USER CLASS: NURSE
     1    NURSE
     2    NURSE - STUDENT
     3    NURSE ANESTHETIST
     4    NURSE CLINICAL SPECIALIST
     5    NURSE EPIDEMIOLOGIST
TYPE '^' TO STOP, OR
CHOOSE 1-5:1
```

2. The current rules for the Nurse User Class are displayed.

```
ASU Rule Browser          Jan 14, 1997 13:46:48      Page: 1 of   1
               List Business Rules by USER CLASS          2 Rules
                           for NURSE
1    An UNTRANSCRIBED NURSE'S NOTE may be entered by A NURSE
2    An AMENDED NURSE'S NOTE may be EDITED by A NURSE OR An
       AUTHOR/DICTATOR


          + Next Screen  - Prev Screen  ?? More Actions
   Find                 Edit Rule              Change View
   Add Rule             Delete Rule            Quit
Select Action: Quit// D   Delete Rule
```

Manage Business Rules, cont'd

3. Select the number of the Business Rule you want to delete. When you get the confirmation message about deleting the rule, you decide to edit it instead, and respond No to the prompt "Do you want to delete the rule?"

```
Select Business Rule(s):  (1-2): 2

Deleting #2
Removing the rule:

An AMENDED NURSE'S NOTE may be EDITED by A NURSE OR An
AUTHOR/DICTATOR

Do you want to delete the rule? NO// <Enter>
Business Rule NOT Removed.
```

4. When the screen is displayed again, the rule is still listed, and the center message bar indicates nothing was deleted.

```
ASU Rule Browser      Jan 14, 1997 13:47:33      Page:  1 of    1
                 List Business Rules by USER CLASS        2 Rules
                          for NURSE
_____
1    An UNTRANSCRIBED NURSE'S NOTE may be ENTERED by A NURSE
2    An AMENDED NURSE'S NOTE may be EDITED by A NURSE OR An
     AUTHOR/DICTATOR




          ** Nothing deleted **
   Find                 Edit Rule              Change View
   Add Rule             Delete Rule           Quit
Select Action: Quit// E   Edit Rule
```

5. Select the Edit Rule action.

```
ASU Rule Browser      Jan 14, 1997 13:47:33        Page: 1 of    1
                  List Business Rules by USER CLASS       2 Rules
                              for NURSE

1     An UNTRANSCRIBED NURSE'S NOTE may be ENTERED by A NURSE
2     An AMENDED NURSE'S NOTE may be EDITED by A NURSE OR An
      AUTHOR/DICTATOR



          + Next Screen  - Prev Screen  ?? More Actions
    Find                  Edit Rule              Change View
    Add Rule              Delete Rule            Quit
Select Action: Quit// E   Edit Rule
```

Manage Business Rules, cont'd

6. Select the rule (#2) and then accept the defaults or enter a new rule component.

```
Select Business Rule(s):  (1-2): 2
Editing #2
DOCUMENT DEFINITION: NURSE'S NOTE// <Enter>
STATUS: AMENDED// <Enter>
ACTION: EDIT RECORD// <Enter>
USER CLASS: NURSE// NURSING SUPERVISOR
AND FLAG: OR// <Enter>
USER ROLE: AUTHOR/DICTATOR// <Enter>
DESCRIPTION:
  1> <Enter>
Refreshing the list.
```

7. The screen is redisplayed with current rules for this User Class. Note that the edited rule isn't displayed. That's because the User Class was changed, so you need to Change View to the new User Class, Nursing Supervisor.

```
ASU Rule Browser          Jan 14, 1997 13:49:50      Page:1 of    1
                  List Business Rules by USER CLASS         1 Rule
                            for NURSE


1    An UNTRANSCRIBED NURSE'S NOTE may be ENTERED by A NURSE




           ** Item 2 Edited **
  Find                 Edit Rule            Change View
  Add Rule             Delete Rule          Quit
Select Action: Quit// C   Change View
```

8. After you respond to prompts for User Class and enter Nursing Supervisor, the screen redisplays with current rules for this User Class.

```
Select SEARCH CATEGORY: DOCUMENT// USER CLASS
Select USER CLASS: NURSING SUPERVISOR

ASU Rule Browser          Jan 14, 1997 14:16:20        Page: 1 of 1
               List Business Rules by USER CLASS          1 Rule
                         for NURSING SUPERVISOR
_____
1     An AMENDED NURSE'S NOTE may be EDITED by A NURSING SUPERVISOR
      OR An AUTHOR/DICTATOR




          + Next Screen  - Prev Screen  ?? More Actions
    Find                Edit Rule               Change View
    Add Rule            Delete Rule             Quit
Select Action: Quit//
```

Business Rule Statuses

Status	Symbol	Sequence	Description
Amended	a	45	The document has been completed and a privacy act issue has required its amendment.
Completed	c	35	The document has acquired all necessary signatures and is legally authenticated.
Deleted	d	47	The document has been deleted but the audit trail is retained.
Incomplete	Any	105	This status applies to document definitions only.
Purged	p	50	The grace period for purge has expired and the report text has been removed from the online record to recover disk space. NOTE: only completed documents may be purged. The chart copy of the document should be retained for archival purposes.
Uncosigned	u	30	The document is complete, with the exception of cosignature by the attending physician.
Undictated	d	5	The document is required and a record has been created in anticipation of dictation and transcription, but the system hasn't been informed of its dictation.
Unreleased	r	15	The document is in the process of being entered into the system, but hasn't been released by the originator (i.e., the person who entered the text online).
Unsigned	$	25	The document is online in a draft state, but the author's signature hasn't yet been obtained.
Untranscribed	t	10	The document is required, and the system has been informed of its dictation, but the transcription hasn't yet been entered or received by upload.
Unverified	v	20	The document has been released or uploaded, but an intervening verification step must be completed before the document is displayed.

Inheritance for Business Rules

Business Rules may have one or both of the following hierarchical attributes:

- Document Definition
- User Class

Sometimes a rule contains a User role but no User Class, and, therefore, only has one hierarchical attribute.

Business Rules are inherited along both of these attribute lines.

Inheritance along the Document Definition line

Rules defined for a given Document Definition are inherited by all Document Definitions below the given one. For example, the following rule is inherited by all Titles since all Titles descend from CLINICAL DOCUMENTS:

```
A COMPLETED (CLASS) CLINICAL DOCUMENT may be VIEWED by a USER
```

In other words, all completed Titles may be viewed by a User.

Overriding Business Rule inheritance:
This Document Definition inheritance can be overridden by setting rules at lower levels of the Document Definition hierarchy.

Example 1:
Rule #1 below is overridden by rule #2, because Document Class NURSE NOTE is under Class CLINICAL DOCUMENTS in the Document Definition hierarchy and both rules have the same Status and Action.

```
1. An UNTRANSCRIBED (CLASS) CLINICAL DOCUMENT may be ENTERED by a
   USER

2. An UNTRANSCRIBED (DOCUMENT CLASS) NURSE NOTE may be ENTERED
   by a NURSE
```

Example 2:

Rule #1 below is overridden by rule #2 because Document Class NURSE NOTE is under Class CLINICAL DOCUMENTS and both rules have the same Status and Action.

```
1. An UNSIGNED (CLASS) CLINICAL DOCUMENT may be VIEWED by an
   AUTHOR/DICTATOR

2. An UNSIGNED (DOCUMENT CLASS) NURSE NOTE may be VIEWED by a
   CHIEF, MIS
```

If both of these rules exist, and an Author/Dictator should be able to view an Unsigned (Document Class) NURSE NOTE, then the following rule must be added:

```
An UNSIGNED (DOCUMENT CLASS) NURSE NOTE may be VIEWED by an
AUTHOR/DICTATOR
```

☞ **NOTE:** Document Definition override permits Clinical Coordinators to modify the behavior of documents for which they are responsible (e.g., NURSE NOTE), without affecting the behavior of other documents.

Inheritance along the User Class line

Rules defined for a given User Class are inherited by all User Classes below the given one. For example, the following rule applies to all users since all User Classes descend from the User Class USER.

```
A COMPLETED (CLASS) CLINICAL DOCUMENT may be VIEWED by a USER
```

Putting the two lines of inheritance together, this rule (if it has not been overridden) means that all completed Titles may be viewed by all users.

Although rules are INHERITED through User Class as well as through the Document Definition hierarchy, inheritance is *not* overridden by the User Class hierarchy.

In fact, if two rules have the same status, the same action, and the same Document Definition, but one rule has a User Class that descends from the User Class of the other rule, then the rule for the more explicit User Class is redundant. It does NOT override the more general rule.

For example, rule #1 below is *not* overridden by rule #2.

```
1. An UNSIGNED (DOCUMENT CLASS) NURSE NOTE may be VIEWED by a MEDICAL
   INFORMATION SECTION

2. An UNSIGNED (DOCUMENT CLASS) NURSE NOTE may be VIEWED by a CHIEF, MIS
```

Instead, the second rule is redundant in the presence of the first rule. It could be eliminated with no effect.

If a site has only rule #2 and wishes to expand those that can view NURSE NOTE from Chief, MIS to the Medical Information Section, they could simply add rule #1. However, it would be more efficient (fewer rules) to simply change the class CHIEF, MIS to MEDICAL INFORMATION SECTION in the second rule.

☞ **NOTE:** The reason there is no inheritance override for User Classes is that the responsibility for User Classes is not divided up the way it is for Document Definitions. For example, the Nursing Clinical Coordinator is responsible for Nursing Note behavior for ALL User Classes, but is *not* responsible for all TIU documents, only for Nurse Notes.

Inheritance and Addenda
Business Rules cannot be set for Addenda, since Addenda inherit their behavior from their parents.

Exported Business Rules

ASU Rule Browser   Jun 20, 1997 16:33:39   Page: 1 of   5
              List Business Rules by DOCUMENT DEFINITION   64 Rules
                    for CLASS **CLINICAL DOCUMENTS**

```
1    An UNTRANSCRIBED (CLASS) CLINICAL DOCUMENT may be ENTERED by A USER
2    An UNRELEASED (CLASS) CLINICAL DOCUMENT may be RELEASED by A TRANSCRIBER
3    An UNSIGNED (CLASS) CLINICAL DOCUMENT may be EDITED by An AUTHOR/DICTATOR
4    An UNSIGNED (CLASS) CLINICAL DOCUMENT may be EDITED by An EXPECTED SIGNER
5    An UNSIGNED (CLASS) CLINICAL DOCUMENT may be SIGNED by An EXPECTED SIGNER
6    An UNSIGNED (CLASS) CLINICAL DOCUMENT may be SIGNED by A PROVIDER who is
     also An EXPECTED COSIGNER
7    A COMPLETED (CLASS) CLINICAL DOCUMENT may be VIEWED by A USER
8    An UNRELEASED (CLASS) CLINICAL DOCUMENT may be EDITED by A TRANSCRIBER
9    An UNRELEASED (CLASS) CLINICAL DOCUMENT may be EDITED by A TRANSCRIPTIONIST
10   An UNCOSIGNED (CLASS) CLINICAL DOCUMENT may be COSIGNED by An EXPECTED
     COSIGNER
11   An UNSIGNED (CLASS) CLINICAL DOCUMENT may be SIGNED by A STUDENT who is
     also An EXPECTED SIGNER
12   An UNSIGNED (CLASS) CLINICAL DOCUMENT may be EDITED by An EXPECTED COSIGNER
13   An UNCOSIGNED (CLASS) CLINICAL DOCUMENT may be EDITED by An EXPECTED COSIGNER
14   An UNVERIFIED (CLASS) CLINICAL DOCUMENT may be DELETED by A CHIEF, MIS
15   An UNDICTATED (CLASS) CLINICAL DOCUMENT may be DELETED by A CHIEF, MIS
16   An UNTRANSCRIBED (CLASS) CLINICAL DOCUMENT may be DELETED by A CHIEF, MIS
17   An UNRELEASED (CLASS) CLINICAL DOCUMENT may be DELETED by A CHIEF, MIS
18   An UNSIGNED (CLASS) CLINICAL DOCUMENT may be DELETED by A CHIEF, MIS
19   An UNCOSIGNED (CLASS) CLINICAL DOCUMENT may be DELETED by A CHIEF, MIS
20   A COMPLETED (CLASS) CLINICAL DOCUMENT may be DELETED by A CHIEF, MIS
21   An AMENDED (CLASS) CLINICAL DOCUMENT may be DELETED by A CHIEF, MIS
22   A COMPLETED (CLASS) CLINICAL DOCUMENT may be PRINTED by A USER
23   An UNSIGNED (CLASS) CLINICAL DOCUMENT may be VIEWED by An EXPECTED COSIGNER
24   An UNCOSIGNED (CLASS) CLINICAL DOCUMENT may be EDITED by A CLINICAL SERVICE CHIEF
25   An UNSIGNED (CLASS) CLINICAL DOCUMENT may be EDITED by A CLINICAL SERVICE
     CHIEF
26   An UNSIGNED (CLASS) CLINICAL DOCUMENT may be SIGNED by An ADDITIONAL SIGNER
27   A COMPLETED (CLASS) CLINICAL DOCUMENT may be SIGNED by An ADDITIONAL SIGNER
28   An UNCOSIGNED (CLASS) CLINICAL DOCUMENT may be SIGNED by An ADDITIONAL
     SIGNER
29   An AMENDED (CLASS) CLINICAL DOCUMENT may be VIEWED by A USER
30   An AMENDED (CLASS) CLINICAL DOCUMENT may be PRINTED by A USER
31   An UNSIGNED (CLASS) CLINICAL DOCUMENT may be COPIED by An AUTHOR/DICTATOR
32   A COMPLETED (CLASS) CLINICAL DOCUMENT may be COPIED by A USER
33   A DELETED (CLASS) CLINICAL DOCUMENT may be DELETED by A CLINICAL
     COORDINATOR
34   An UNSIGNED (CLASS) CLINICAL DOCUMENT may be SENT BACK by A MEDICAL
     INFORMATION SECTION
35   An UNVERIFIED (CLASS) CLINICAL DOCUMENT may be SENT BACK by A MEDICAL
     INFORMATION SECTION
36   An UNCOSIGNED (CLASS) CLINICAL DOCUMENT may be VIEWED by An EXPECTED
     COSIGNER
37   An UNCOSIGNED (CLASS) CLINICAL DOCUMENT may be VIEWED by A CLINICAL SERVICE
     CHIEF
38   A COMPLETED (CLASS) CLINICAL DOCUMENT may be AMENDED by A CHIEF, MIS
39   A COMPLETED (CLASS) CLINICAL DOCUMENT may be ADDENDED by A USER
40   An AMENDED (CLASS) CLINICAL DOCUMENT may be ADDENDED by A USER
```

*Exported Business Rules, **cont'd***

```
41   A DELETED (CLASS) CLINICAL DOCUMENT may be VIEWED by A USER
42   A DELETED (CLASS) CLINICAL DOCUMENT may be DELETED by A CHIEF, MIS
43   A PURGED (CLASS) CLINICAL DOCUMENT may be DELETED by A CHIEF, MIS
44   A PURGED (CLASS) CLINICAL DOCUMENT may be VIEWED by A USER
45   An UNTRANSCRIBED (CLASS) CLINICAL DOCUMENT may be VIEWED by A CHIEF, MIS
46   An UNRELEASED (CLASS) CLINICAL DOCUMENT may be VIEWED by A CHIEF, MIS
47   An UNDICTATED (CLASS) CLINICAL DOCUMENT may be VIEWED by A USER
48   A COMPLETED (CLASS) CLINICAL DOCUMENT may be IDENTIFIED FOR SIGNATURE by An
     AUTHOR/DICTATOR
49   An UNCOSIGNED (CLASS) CLINICAL DOCUMENT may be IDENTIFIED FOR SIGNATURE by
     An AUTHOR/DICTATOR
50   An UNCOSIGNED (CLASS) CLINICAL DOCUMENT may be IDENTIFIED FOR SIGNATURE by An
     EXPECTED COSIGNER
51   A COMPLETED (CLASS) CLINICAL DOCUMENT may be IDENTIFIED FOR SIGNATURE by An
     EXPECTED COSIGNER
52   An UNSIGNED (CLASS) CLINICAL DOCUMENT may be REASSIGNED by A MEDICAL
     INFORMATION SECTION
53   An UNSIGNED (CLASS) CLINICAL DOCUMENT may be REASSIGNED by An
     AUTHOR/DICTATOR
54   An UNSIGNED (CLASS) CLINICAL DOCUMENT may be HAVE ITS TITLE CHANGED by An
     AUTHOR/DICTATOR
55   A COMPLETED (CLASS) CLINICAL DOCUMENT may be HAVE ITS TITLE CHANGED by A
     CHIEF, MIS
56   An UNCOSIGNED (CLASS) CLINICAL DOCUMENT may be HAVE ITS TITLE CHANGED by An
     EXPECTED COSIGNER
57   An UNCOSIGNED (CLASS) CLINICAL DOCUMENT may be HAVE ITS TITLE CHANGED by A
     CLINICAL SERVICE CHIEF
58   A COMPLETED (CLASS) CLINICAL DOCUMENT may be REASSIGNED by A CHIEF, MIS
59   An UNVERIFIED (CLASS) CLINICAL DOCUMENT may be VIEWED by A MEDICAL
     INFORMATION SECTION
60   An UNVERIFIED (CLASS) CLINICAL DOCUMENT may be VERIFIED by A MEDICAL
     INFORMATION SECTION
61   An UNVERIFIED (CLASS) CLINICAL DOCUMENT may be EDITED by A MEDICAL
     INFORMATION SECTION
62   An UNVERIFIED (CLASS) CLINICAL DOCUMENT may be PRINTED by A MEDICAL
     INFORMATION SECTION
63   An UNRELEASED (CLASS) CLINICAL DOCUMENT may be VIEWED by A TRANSCRIBER
64   An UNRELEASED (CLASS) CLINICAL DOCUMENT may be VIEWED by A TRANSCRIPTIONIST
```

Exported Business Rules, cont'd

```
             List Business Rules by DOCUMENT DEFINITION        23 Rules
                       for CLASS PROGRESS NOTES
-----------------------------------------------------------------------------
1    A COMPLETED (CLASS) PROGRESS NOTE may be VIEWED by A USER
2    An UNSIGNED (CLASS) PROGRESS NOTE may be EDITED by A STUDENT who is also An
     AUTHOR/DICTATOR
3    An UNSIGNED (CLASS) PROGRESS NOTE may be DELETED by An AUTHOR/DICTATOR
4    An UNSIGNED (CLASS) PROGRESS NOTE may be VIEWED by An AUTHOR/DICTATOR
5    An UNCOSIGNED (CLASS) PROGRESS NOTE may be VIEWED by An AUTHOR/DICTATOR
6    An UNCOSIGNED (CLASS) PROGRESS NOTE may be VIEWED by An EXPECTED COSIGNER
7    An UNSIGNED (CLASS) PROGRESS NOTE may be PRINTED by An AUTHOR/DICTATOR
8    An UNCOSIGNED (CLASS) PROGRESS NOTE may be PRINTED by An AUTHOR/DICTATOR
9    An UNCOSIGNED (CLASS) PROGRESS NOTE may be EDITED by An EXPECTED COSIGNER
10   An UNSIGNED (CLASS) PROGRESS NOTE may be EDITED by An AUTHOR/DICTATOR
11   An UNCOSIGNED (CLASS) PROGRESS NOTE may be PRINTED by An EXPECTED COSIGNER
12   An UNSIGNED (CLASS) PROGRESS NOTE may be SIGNED by An AUTHOR/DICTATOR
13   An UNCOSIGNED (CLASS) PROGRESS NOTE may be COSIGNED by An EXPECTED COSIGNER
14   An UNSIGNED (CLASS) PROGRESS NOTE may be VIEWED by A CHIEF, MIS
15   An UNSIGNED (CLASS) PROGRESS NOTE may be DELETED by A CHIEF, MIS
16   An UNCOSIGNED (CLASS) PROGRESS NOTE may be VIEWED by A CHIEF, MIS
17   An UNCOSIGNED (CLASS) PROGRESS NOTE may be DELETED by A CHIEF, MIS
18   An UNSIGNED (CLASS) PROGRESS NOTE may be EDITED by An EXPECTED COSIGNER
19   An UNSIGNED (CLASS) PROGRESS NOTE may be VIEWED by An EXPECTED COSIGNER
20   An UNSIGNED (CLASS) PROGRESS NOTE may be EDITED by A CLINICAL SERVICE CHIEF
21   An UNSIGNED (CLASS) PROGRESS NOTE may be VIEWED by A CLINICAL SERVICE CHIEF
22   An UNSIGNED (CLASS) PROGRESS NOTE may be SIGNED by A CLINICAL SERVICE CHIEF
23   An UNSIGNED (CLASS) PROGRESS NOTE may be SIGNED by An EXPECTED COSIGNER
```

Exported Business Rules, ***cont'd***

```
            List Business Rules by DOCUMENT DEFINITION          17 Rules
                     for CLASS DISCHARGE SUMMARY
-------------------------------------------------------------------------------
1    An UNSIGNED (CLASS) DISCHARGE SUMMARY may be EDITED by A PROVIDER who is
     also An EXPECTED COSIGNER
2    An UNSIGNED (CLASS) DISCHARGE SUMMARY may be SIGNED by A PROVIDER who is
     also An ATTENDING PHYSICIAN
3    An UNCOSIGNED (CLASS) DISCHARGE SUMMARY may be COSIGNED by A PROVIDER who
     is also An EXPECTED COSIGNER
4    An UNVERIFIED (CLASS) DISCHARGE SUMMARY may be VIEWED by A MEDICAL
     INFORMATION SECTION
5    An UNCOSIGNED (CLASS) DISCHARGE SUMMARY may be EDITED by A PROVIDER who is
     also An EXPECTED COSIGNER
6    An UNSIGNED (CLASS) DISCHARGE SUMMARY may be SIGNED by A CLINICAL SERVICE
     CHIEF
7    An UNVERIFIED (CLASS) DISCHARGE SUMMARY may be VERIFIED by A MEDICAL
     INFORMATION SECTION
8    An UNVERIFIED (CLASS) DISCHARGE SUMMARY may be EDITED by A MEDICAL
     INFORMATION SECTION
9    An UNVERIFIED (CLASS) DISCHARGE SUMMARY may be PRINTED by A MEDICAL
     INFORMATION SECTION
10   An UNSIGNED (CLASS) DISCHARGE SUMMARY may be VIEWED by A USER
11   An UNSIGNED (CLASS) DISCHARGE SUMMARY may be PRINTED by A USER
12   An UNSIGNED (CLASS) DISCHARGE SUMMARY may be ADDENDED by A USER
13   An UNCOSIGNED (CLASS) DISCHARGE SUMMARY may be ADDENDED by A USER
14   An UNCOSIGNED (CLASS) DISCHARGE SUMMARY may be VIEWED by A USER
15   An UNCOSIGNED (CLASS) DISCHARGE SUMMARY may be COSIGNED by A CLINICAL
     SERVICE CHIEF
16   An UNCOSIGNED (CLASS) DISCHARGE SUMMARY may be EDITED by A CLINICAL SERVICE
     CHIEF
       17   An UNSIGNED (CLASS) DISCHARGE SUMMARY may be SIGNED by An EXPECTED
       SIGNER
```

GLOSSARY

ASU	Authorization/Subscription Utility, a utility that allows sites to associate users with user classes, allowing them to specify the level of authorization needed to sign, order, or perform other actions on specific document definitions and orderables.
Action	A functional process that a clinician or clerk uses in the TIU computer program. "Edit," "Create," and "Find" are examples of actions. Actions used in List Manager applications are also known as protocols.
Boilerplate Text	A pre-defined Progress Notes or Discharge Summary template containing standard text, with blanks to fill in for specific data about a patient.
Business Rule	Business Rules in ASU authorize specific users or groups of users to perform specified actions on documents in particular statuses. A set of business rules is exported with TIU/ASU; sites can edit or add to these.
Class	Classes are groups of groups which hold documents. For example, Progress Notes is a Class with many Document Classes (kinds of progress notes) under it. Classes may themselves be subdivided into Classes and/or may go straight to Document Class if no further subdivisions are desired. Besides grouping documents, Classes also store behavior which is then inherited by lower level entries.
Clinician	A doctor or other provider in the medical center who is authorized to provide patient care.
Component	Components are "sections" or "pieces" of documents, such as Subjective, Objective, Assessment, and Plan in a SOAP Progress

Glossary cont'd

Discharge Summary   A discharge summary is a formal synopsis of a patient's medical care during a single hospitalization. It includes the pertinent diagnostic and therapeutic tests and procedures as well as the conclusions generated by those tests. A discharge summary is prepared for all discharges and transfers from a VA medical center or domiciliary or from nursing home care. The automated Discharge Summary module of TIU provides an efficient and immediate mechanism for clinicians to capture transcribed patient discharge summaries online, where they're available for review, signing, adding addendum, etc.

Document Class   Document Classes group documents. Document Class is the lowest level of class, and has Titles as items under it.

Document Definition   The Document Definition utility provides the building blocks for TIU, by organizing types of documents into a hierarchy structure. This structure allows documents (Titles) to inherit characteristics (such as signature requirements and print characteristics) of the higher levels, Class and Document Class.

HIMS   A common abbreviation/synonym used at VA facilities for Health Information Management Section of Medical Administration Service. May also be called MIS for the Medical Information Section.

IRT   Incomplete Record Tracking, a V*IST*A application that can interface with TIU to track incomplete discharge summaries and progress notes.

Glossary cont'd

MIS Common abbreviation/synonym used at VA site facilities for the Medical Information Section of Medical Administration Service. May be called HIMS (Health Information Management Section).

MIS Manager Manager of the Medical Information Section of Medical Administration Service at the site facility who has ultimate responsibility to see that MRTs complete their duties.

MRT Medical Record Technician in the Medical Information Section or HIMS of Medical Administration Service who completes the tasks of assuring that all discharge summaries placed in a patient's medical record have been verified for accuracy and completion and that a permanent chart copy has been placed in a patient's medical record for each separate admission to the hospital.

Object Objects are placeholders which may be embedded in the predefined boilerplate text of Titles. An example of an "Object" is "PATIENT AGE." Objects are typed into the boilerplate text of a Title, enclosed by '|'s. If a Title has the boilerplate text:
```
Patient is a healthy |PATIENT AGE| year old male
```
then a user who enters such a note for a 56 year old patient would be presented with the text:
```
Patient is a healthy 56 year old male
```

Progress Notes The Progress Notes module of TIU is used by health care givers to enter and sign online patient progress notes and by transcriptionists to enter notes to be signed by caregivers at a later date. Caregivers may review progress notes online or print progress notes in chart format for filing in the patient's record.

TIU Text Integration Utilities, a V*IST*A product for handling text applications.

Glossary cont'd

Title   Titles are definitions for documents. They store the behavior of the documents that use them.

User Class   User Classes are the basic component of ASU (Authorization/ Subscription Utility). The User Class file contains the different categories of users within a hospital. ASU allows sites to designate who is authorized to do what.

APPENDIX A: TIU RELEASED PATCHES

TIU Released Patches Descriptions

Descriptions of all TIU in testing and released are kept up-to-date on the following web page:

http://vista.med.va.gov/softserv/clin_bro.ad/tiu/html/Enhance.htm

TIU Released Patches

Descriptions of these patches follow the listing below.

Patch Number	Patch Subject
TIU*1*01	FIX PROBLEMS WITH RPC'S FOR CPRS
TIU*1*02	FIX OBJECT/DOCUMENT DEFINITION PROBLEMS
TIU*1*03	FIX UPLOAD ERROR RESOLUTION
TIU*1*04	ADD CONSULT RESULTING TO TIU
TIU*1*05	FIX PROBLEM WITH REACTIVATING TITLES
TIU*1*06	FIX STRING TOO LONG ERROR IN DOCMT DEFS
TIU*1*07	TIU/CPRS PROBLEMS, OTHER PROBLEMS
TIU*1*08	PRINT LIST ACTION ON DDEF BLPLT SCREEN
TIU*1*09	FIXES FOR CONVERSIONS
TIU*1*10	FIX <UNDEF> AT ES+5 IN TIURS
TIU*1*11	ACTION TO MOVE DOCUMENT DEFINITIONS
TIU*1*12	FIX OBJECT PROBLEMS IN DOCUMENT DEFS
TIU*1*13	DOCUMENT DEFINITION CORRECTIONS
TIU*1*14	ADD FIELDS TO DDEF OPTIONS
TIU*1*15	FIX ALLOCATE ERRORS & PCE/TIU PROBLEMS
TIU*1*16	BUSINESS RULE, DOC PARAM INHERITANCE
TIU*1*17	ENHANCE DDEF SHARED CO; NEW FIELD DESC
TIU*1*18	FIX IRT INTERFACE PROBLEMS
TIU*1*19	FIX CPRS GUI PROBLEMS AND OTHERS
TIU*1*20	CAPTURE WORKLOAD ON ALL VISITS
TIU*1*21	FIX UPLOAD PROBLEMS
TIU*1*22	FIX PROBS WITH OBJECTS, WORKLOAD, CONSULT
TIU*1*23	EXEMPT PURGING OF PN ADDENDA
TIU*1*24	FIX LEXICON API TO ALLOW HCPCS
TIU*1*25	FIX PN PRINT BY WARD
TIU*1*26	RE-INDEX TIU DOCUMENT [8925] FILE FOR CPR
TIU*1*27	DOCUMENT DEFINITION COPY/MOVE CHANGES
TIU*1*28	FIX CONCURRENCY PROBLEMS W/CPRS
TIU*1*29	FIX PROVIDER RECOGNITION PROBLEM
TIU*1*30	FIX SERVICE AND LOCATION PROBLEMS
TIU*1*31	FIXES FOR CONSULTS INTERFACE
TIU*1*32	FIXES FOR BROWSE, AUTO-PRINT, & DISPLAY

Patch Number	Patch Subject
TIU*1*33	FIX DD'S FOR SIGNATURE BLOCK NAMES
TIU*1*34	FIX MISSING VITALS INFORMATION FOR MULTIP
TIU*1*35	MORE THAN 20 DOCUMENTS ON PERSONAL LIST
TIU*1*36	FIX COPY, CHANGE TITLE & NEW NOTE PROBS
TIU*1*37	FIXES <UNDEFINED>WIPEOUT+3 TIUPNCV8
TIU*1*38	NEW MEDICATION OBJECTS
TIU*1*39	FIX VISIT-RELATED PROBLEMS
TIU*1*40	FIX INAPPROPRIATE PROMPTS FOR COSIGNER
TIU*1*41	FIXES SUPPRESS VISIT SELECTION PROBLEMS
TIU*1*42	FIXES <UNDEF> S+2 IN DIC (DOC LIST MGMT)
TIU*1*43	FIX 'ALL' IN DOCUMENT DEFINITION MENU TEX
TIU*1*44	FIX FOOTER PRINT PROBLEM ON TCP PRINTERS
TIU*1*45	FIX PROGRESS NOTE DIV PR
TIU*1*46	FIX ALLERGIES/ADR NKA PROBLEM
TIU*1*47	FIX IRT CALL & ENHANCEMENTS FOR GUI
TIU*1*48	FIX NOTE COPY PROBLEMS
TIU*1*49	FIX OVERRIDE FOR SUPPRESS VISIT SELECTION
TIU*1*50	SCREEN TERMINATED USERS AS AUTHORS, ETC.
TIU*1*51	FIX 'ACL' CROSS-REFERENCE
TIU*1*52	FIX AMENDMENT AND /ES/-BLOCK ISSUES
TIU*1*53	DISABLE PURGE & CORRECT LINE COUNT PROBLEM
TIU*1*54	INCLUDE TITLES IN CWAD LISTS
TIU*1*55	DISCHARGE SUMMARY PRINTING PROBLEMS
TIU*1*56	FIX PAGE:1 OF 0 PROB
TIU*1*57	ENHANCE TIUPNAPI FOR ASI & ART
TIU*1*58	FIX RESTRICTED PATIENT ACCESS AND ADDITIONAL SIGNERS
TIU*1*59	SET DEFAULT LOCATION ON
TIU*1*60	NOT USED
TIU*1*61	FIX PROBLEMS WITH REASSIGNMENT
TIU*1*62	SWITCH CPT RESOLUTION TO ICPTCOD
TIU*1*63	INTRODUCE LINKS TO IMAGING/ENHANCEMENTS FOR CPRS
TIU*1*64	LOOSEN NATIONAL TITLE (CWAD) RESTRICTIONS
TIU*1*65	MISSING SIGNED ON CHART NOTES
TIU*1*66	SETTING OF 'DA' FOR FM 22
TIU*1*67	FIX PROBLEMS PROMPTING FOR WORKLOAD IN TIU
TIU*1*68	IMPROVE RELIABILITY OF C&P UPLOAD
TIU*1*69	FIX TIU ALERT PROB IN GUI
TIU*1*70	TIU PAIN OBJECT
TIU*1*71	SIGNED ON CHART ALERTS
TIU*1*72	DUPLICATE CONSULTS SERVICE NAME PROBLEM
TIU*1*73	NEW MEDICATION OBJECT OPTIONS
TIU*1*74	FIX DATE-RANGE PROBLEM WHEN TIME NOT ENTERED
TIU*1*75	UNDEFS AT SELCAT+20 IN TIULA1 AND GATHER+10 IN TIUR
TIU*1*76	SUPPORT FOR TEMPLATES
TIU*1*77	DOCUMENT DEFINITION: ADD USED SHARED COMPONENT, SHOW SPA IN OBJECT METHOD
TIU*1*78	LINK PROBLEMS TO NOTES
TIU*1*79	FIX COPY CONSULTS / ALLOCATION ERROR PROBLEMS
TIU*1*80	TEMPLATE ENHANCEMENTS & FIXES TO CWAD

Patch Number	Patch Subject
TIU*1*81	FIX PARAMETER TERMINOLOGY, DESCRIPTIONS, FIX UPLOAD ALER
TIU*1*82	CPT MODIFIER ENHANCEMENT
TIU*1*83	HEALTH SUMMARY EXTRACT BY VISIT
TIU*1*84	FIXES TO SIGNATURE ALERTS
TIU*1*86	FIX DEFAULT DATE RANGE IN REVIEW NOTES
TIU*1*87	CORRECTIONS TO BROWSE AND DETAILED DISPLAY
TIU*1*88	FIXES TO ADDENDUM PROCESSING
TIU*1*89	CHANGES FOR WINDOWS PRINTING, GUI CONSULTS, & GUI ENCOUN
TIU*1*90	FIX UNDEFINED AT AUPNVSIT(-1,0), FIX DUPLICATE TITLE
TIU*1*91	FIX PERSONAL PREFERENCES
TIU*1*92	PATIENT SAFETY WARNING W/SUPPLIES
TIU*1*93	FIX OVERDUE ALERTS FOR PN & DATE DISPLAY
TIU*1*94	IMPROVE SUPPLY FILTERING IN MEDICATION OBJECTS
TIU*1*95	USER CLASS MEMBERSHIP EXPIRATION DATE FOR USERS REQUIRING CO-SIGNATURE
TIU*1*98	FIX COMPLETION ON STUDENT SIGNATURE PROBLEM
TIU*1*99	FIX DOCMT DEFINITION STATUS OPTION & PRINT LIST ACTION
TIU*1*100	INTERDISCIPLINARY NOTES
TIU*1*101	ADD UNITS AND METRIC VALUES TO VITAL OBJECTS
TIU*1*102	ADD TEMPLATE DIALOGS AND TEMPLATE GENERATE
TIU*1*103	FIX BOILERPLATE CODE/ALLOW TITLE LISTS FOR CONSULTS
TIU*1*104	ASSURE CWAD-NOTES POST FROM CPRS GUI
TIU*1*107	CHECK WORKLOAD BASED ON VISIT TYPE AND ADD MST PROMPT
TIU*1*108	SEARCH & GROUP ENHANCEMENTS FOR CPRS GUI v15

APPENDIX B: USER CLASS MEMBERSHIP EXPIRATION DATE FOR USERS REQUIRING CO-SIGNATURE (PATCH TIU*1.0*95)

☞ **WARNING:** In some cases, users may gain inappropriate privileges when their user class membership expires. In particular, users who require co-signature may be able to complete documents without co-signature when their membership in that user class expires.

This is how it happens:

TIU/ASU software automatically regards all users as members of the exported root class USER. Sites often assign users to additional classes. Generally this provides the user with additional privileges. However, some user class assignments impose **RESTRICTIONS.**

This is the case with classes entered for the TIU DOCUMENT DEFINITION parameter USERS REQUIRING COSIGNATURE. Here, user classes such as STUDENT impose a co-signature requirement on class members: when a student signs a document, the student is required to enter an expected cosigner, and the document is not complete until it is cosigned.

The problem occurs when such a membership expires, while the user remains a student, requiring co-signature. **When the membership expires, the user's restrictions are removed, and if the student still has an account and menu access, they can enter and complete notes without requiring a co-signature.**

For example:

- Suppose the following is defined in ASU:
    - A user is a member of the STUDENT user class with an EFFECTIVE DATE of January 1, 2001 and EXPIRATION DATE of June 30, 2001. There are no additional user class definitions for the user.
- And suppose the following parameter is defined in TIU:
    - STUDENTs require co-signature upon writing a new PROGRESS NOTE.

Then,

- From January 1, 2001 through midnight June 30, 2001 the user requires co-signature upon writing a new PROGRESS NOTE. This is appropriate.
- If the user remains active (not terminated, etc.), their functional privileges only include those defined for the USER user class as of July 1, 2001. This user class does not require co-signature upon writing a new PROGRESS NOTE, thus effectively increasing privileges for the user. **If in fact the user is still a student and still requires co-signature, then this is NOT appropriate**.

The following actions are recommended to ensure that users who require co-signature are not inadvertently permitted to complete notes without co-signature:

- Look up USERS REQUIRING COSIGNATURE for each TIU DOCUMENT PARAMETERS file entry at your site to determine which classes require co-signature.
- Review all active (current V*IST*A) members of each of these user classes, noting expiration date if it exists.
  A FileMan print/search from the USR CLASS MEMBERSHIP file could be used to provide a list of class memberships. See below for an example related to the STUDENT user class.
- Determine the appropriateness of these user class assignments.
- Modify user class assignments as necessary. Modification may include one or more of the following:

    - Terminate User Account
    - Remove TIU and/or CPRS GUI option(s) from user
    - Delete the EXPIRATION DATE for the user class membership
    - Edit the EXPIRATION DATE to future date
    - If the user has "graduated", you may want to assign a new user class.

Example of FileMan print:

Or earliest date known.

```
Select VA FileMan Option: Print File Entries

OUTPUT FROM WHAT FILE: USR CLASS MEMBERSHIP// <Enter>
SORT BY: NUMBER// '@EXPIRATION DATE
START WITH EXPIRATION DATE: FIRST// 1/1/80
GO TO EXPIRATION DATE: LAST// T-1
  WITHIN EXPIRATION DATE, SORT BY: '@USER CLASS
  START WITH USER CLASS: FIRST// STUDENT
  GO TO USER CLASS: LAST// STUDENT
    WITHIN USER CLASS, SORT BY: MEMBER:
    NEW PERSON FIELD: '@LAST SIGN-ON DATE/TIME
    START WITH LAST SIGN-ON DATE/TIME: FIRST// T-30
    GO TO LAST SIGN-ON DATE/TIME: LAST// <Enter>
      WITHIN LAST SIGN-ON DATE/TIME, SORT BY: MEMBER
      START WITH MEMBER: FIRST//<Enter>
        WITHIN MEMBER, SORT BY: <Enter>
STORE IN 'SORT' TEMPLATE: <Enter>
FIRST PRINT FIELD: MEMBER
THEN PRINT FIELD: EXPIRATION DATE
THEN PRINT FIELD: MEMBER:
  THEN PRINT NEW PERSON FIELD: LAST SIGN-ON DATE/TIME
  THEN PRINT NEW PERSON FIELD: <Enter>
  THEN PRINT FIELD: <Enter>
Heading (S/C): USR CLASS MEMBERSHIP LIST  Replace USR With STUDENT USR
  Replace
    STUDENT USR CLASS MEMBERSHIP LIST
STORE PRINT LOGIC IN TEMPLATE: <Enter>
START AT PAGE: 1// <Enter>
DEVICE: <Enter>


STUDENT USR CLASS MEMBERSHIP LIST              FEB 13,2001  (Today)   PAGE 1
                    EXPIRATION   LAST SIGN-ON
MEMBER              DATE         DATE/TIME
-----------------------------------------------------------------------------
USERA,A             JAN 20,2001  JAN 18,2001  11:11
USERB,B             JUN  1,2000  FEB  6,2001  12:38
USERC,C             FEB 28,2001  FEB 13,2001  09:05
USERD,D             FEB 12,2001  FEB 13,2001  08:55
```

Or choose another date range to determine current active users.

You could also print the NEW PERSON field TERMINATION DATE.

Comments:

- USERA: This user last signed into **V**_IST_**A** on Jan 18,2001 and today is Feb 13,2001. It appears this user is no longer working at the site. Take the necessary steps to verify this, and if so, ensure their account is terminated. If not, see below.

- USERB & USERD: These users have recently signed into **V**_IST_**A**, and their STUDENT class assignment expired – for one user, months ago; for the other, a day ago.
  - If they are still STUDENTs, **they now have the ability to complete notes without co-signature, which is not appropriate**. You should either delete the EXPIRATION DATE or edit it to a more accurate date in the future.
  - If they are no longer STUDENTs, but have become, say, RESIDENTS, and no longer require co-signature, then the student expiration date does not pose a problem. You may want to verify they have the appropriate new class membership so that they enjoy all privileges of their new class.

- USERC: This user has recently signed into **V**_IST_**A**, and their STUDENT user class membership will expire in several weeks.
  - o If the student will no longer be working at the site as of that date, plan to terminate their access.
  - o If the user may still be working at the site as of that date, and will still be a student, you should either delete the EXPIRATION DATE or edit it to a more accurate date in the future.
  - o If the user will still be working at the site as of that date, but will no longer be a student, and will no longer require co-signature, the expiration date does not pose a problem. However, you may want to set up the appropriate new class membership to begin upon expiration of the student membership, so that they enjoy all privileges of their new class.

APPENDIX C: INTERDISCIPLINARY NOTES SETUP GUIDE

Interdisciplinary Notes is a new feature of Text Integration Utilities (TIU) for expressing notes from different care givers as a single episode of care. They always start with a single note by the initial contact person (e.g., triage nurse, case manager, attending) and continue with separate notes created and attached to the original note.

To accomplish this, your facility must set up new document definitions and user classes within TIU. An Interdisciplinary Note consists of a parent title note and one or more child title notes. A parent title note (parent note) is a single note by the initial contact person. A child title note (child note) is a single entry note attached to the parent note.

The behavior of parent and child notes is different and mutually exclusive. Your users must be able to identify which note titles can act as parents for their particular service area, and which can be attached to those notes.

You may want to put limits as to which users have the ability to create Interdisciplinary Note entries. In addition, provisions should be made for select users to have the ability to perform correction to Interdisciplinary Notes.

Titles

☞ **Note:** Decide on a nomenclature, with the consensus from stakeholders, prior to implementation and remain consistent throughout the facility.

It is likely that several service areas at your medical center are interested in Interdisciplinary Notes. Choose one of these service area and one particular note to implement. Then meet with the clinical staff to plan the note structure.

Consider the following title scheme:

REHAB Parent Treatment Plan
    REHAB Child Initial Assessment Note
    REHAB Child Nurse Note
    REHAB Child Physical Therapy Note
    REHAB Child Occupational Therapy Note
    REHAB Child Pharmacy Note
    REHAB Child Psychology Note
    REHAB Child Discharge Planning Note

Notice that each note has "Parent" or "Child" as part of its title.

Consider the following list of parent titles:

ER <u>Cover</u> Note
ER <u>ID Parent</u> Note
Rehab <u>IDP</u> Note
Rehab <u>Routing</u> Note
Same-day Surgery <u>Team</u> Note
End-of-Life <u>Team</u> Note
Pain Clinic <u>IN Parent</u> Note
Mental Health <u>Team</u> Note
Discharge Planning <u>Cover</u> Note

In each case, the underlined word or phrase would be reserved for only parent note titles. Clinicians responsible for starting an Interdisciplinary Note should be aware of which note titles are potential parent note titles.

Similarly, you should use an indicator to differentiate child note titles. Clinicians responsible for adding to Interdisciplinary notes should be aware of which note titles are potential child note titles.

Next, plan a note structure for the service area you have selected to initially implement Interdisciplinary Notes. Write the planned titles down and discuss them with stakeholders. Once you have a consensus, enter the titles into the TIU document definition hierarchy.

1. Create a parent title under an existing document class.
2. Create a document class for the child titles.
3. Enter the child titles under the child titles document class.

In our example the parent title looks like this:

```
Create Document Definitions   Apr 12, 2001@10:27:55      Page:    1 of  1
                              BASICS

+      Name                                                       Type
2         PROGRESS NOTES                                          CL
3           REHAB SERVICE                                         DC
4             REHAB PARENT TREATMENT PLAN                         TL




          ?Help   >ScrollRight    PS/PL PrintScrn/List   +/-          >>>
       (Class/DocumentClass)      Next Level           Detailed Display/Edit
       Title                      Restart              Status...
       (Component)                Boilerplate Text     Delete
Select Action: Title//
```

There are seven (7) child titles in the Interdisciplinary Note we are implementing. The
child Document Class and its members look like this:

```
Create Document Definitions   Apr 12, 2001@10:27:55      Page:    1 of  1
                              BASICS

+      Name                                                       Type
2         PROGRESS NOTES                                          CL
3           INTERDISC CHILD DOCUMENT                              DC
4             REHAB CHILD DISCHARGE PLANNING NOTE                 TL
5             REHAB CHILD INITIAL ASSESSMENT NOTE                 TL
6             REHAB CHILD NURSE NOTE                              TL
7             REHAB CHILD OCCUPATIONAL THERAPY NOTE               TL
8             REHAB CHILD PHARMACY NOTE                           TL
9             REHAB CHILD PHYSICAL THERAPY NOTE                   TL
10            REHAB CHILD PSYCHOLOGY NOTE                         TL



          ?Help   >ScrollRight    PS/PL PrintScrn/List   +/-          >>>
       (Class/DocumentClass)      Next Level           Detailed Display/Edit
       Title                      Restart              Status...
       (Component)                Boilerplate Text     Delete
Select Action: Title//
```

User Classes

Consider the users who are going to create and/or attach Interdisciplinary note entries. It would be advantageous to limit which users can perform these actions. In our example, we created an Authorization/Subscription Utility (ASU) user class called REHAB TEAM MEMBER.

If it is conducive to your working environment, we recommend that you set up user classes by the treatment teams using Interdisciplinary notes.

Also, consider who is going to make corrections to Interdisciplinary notes. In our examples, the person with the ASU User Class of CHIEF, MIS is designated to perform this duty.

Parent Business Rules

BE GIVEN AN ID ATTACHMENT (entered as ATTACH ID ENTRY) is a new ASU
action that permits the designated title note entry to receive child notes, thus creating
an Interdisciplinary Note entry.

```
A COMPLETED (TITLE) REHAB PARENT TREATMENT PLAN may BE GIVEN AN ID ATTACHMENT by a
REHAB TEAM MEMBER
```

This is the minimum rule necessary for establishing REHAB Parent Treatment Plan
title as an interdisciplinary parent title.

If you are not able to establish a user class of REHAB TEAM MEMBER, then the rule
should be stated as follows:

```
A COMPLETED (TITLE) REHAB PARENT TREATMENT PLAN may BE GIVEN AN ID ATTACHMENT by a
USER
```

You may also want to add the following rule:

```
An UNCOSIGNED (TITLE) REHAB PARENT TREATMENT PLAN may BE GIVEN AN ID ATTACHMENT by a
REHAB TEAM MEMBER
```

Uncosigned is the lowest status that can act as a parent note. The software will not
allow a child note to be attached to a parent note unless the parent note is at least in
the uncosigned status.

All these rules are symmetrical—they apply equally to attaching and detaching child
notes. (In list manager, the Interdisciplinary Notes (IN) action is also symmetrical—it
will either attach or detach a note depending on the circumstances.) Any user who is
authorized (via ASU business rules) to attach a note, is also authorized to detach that
note.

Parent Business Rules for Managers

You should echo each of these rules for the user class CHIEF, MIS, thus allowing the Chief of MIS (or designee) to perform corrective actions on Interdisciplinary Note entries.

The business rules for the user class CHIEF, MIS should look like this:

```
A COMPLETED (TITLE) REHAB PARENT TREATMENT PLAN may BE GIVEN AN ID ATTACHMENT by a
CHIEF, MIS
An AMENDED (TITLE) REHAB PARENT TREATMENT PLAN may BE GIVEN AN ID ATTACHMENT by a
CHIEF, MIS
An UNCOSIGNED (TITLE) REHAB PARENT TREATMENT PLAN may BE GIVEN AN ID ATTACHMENT by a
CHIEF, MIS
```

In addition to the CHIEF, MIS user class having the ability to correct Interdisciplinary Note entries, consideration should be given to creating a user class for the management on Interdisciplinary Notes entries. You might call this class IN MANAGEMENT TEAM. This user class would consist of users who are intimately involved in the planning, implementation, and maintenance of Interdisciplinary notes. If you do set up such a user class, then add the following rules:

```
A COMPLETED (TITLE) REHAB PARENT TREATMENT PLAN may BE GIVEN AN ID ATTACHMENT by an
IN MANAGEMENT TEAM
An AMENDED (TITLE) REHAB PARENT TREATMENT PLAN may BE GIVEN AN ID ATTACHMENT by an
IN MANAGEMENT TEAM
An UNCOSIGNED (TITLE) REHAB PARENT TREATMENT PLAN may BE GIVEN AN ID ATTACHMENT by
an IN MANAGEMENT TEAM
```

Child Business Rules

BE ATTACHED is a new ASU action (entered as ATTACH TO ID NOTE) that permits a child note entry to be attached to a parent entry.

For this user class, we initially created one business rule:

```
A COMPLETED (TITLE) INTERDISC CHILD DOCUMENT may BE ATTACHED to an ID note by a
COMPLETER
```

COMPLETER is a user role exported with USR*1*15 to support the creation of an Interdisciplinary Note. It indicates the user, either signer or cosigner, who is responsible for changing the status of the note to COMPLETED.

This rule is mandatory for all child note titles. Upon selecting a designated parent entry, a user may directly create a child note entry. However, if the above business rule does not exist, the user will not see the complete list of available titles designated as child entry titles.

In addition to the mandatory rule shown above, you should also include the following rules:

```
An UNCOSIGNED (TITLE) INTERDISC CHILD DOCUMENT may BE ATTACHED to an ID note by a
EXPECTED COSIGNER
A UNCOSIGNED (TITLE) INTERDISC CHILD DOCUMENT may BE ATTACHED to an ID note by a
AUTHOR/DICTATOR
An COMPLETED (TITLE) INTERDISC CHILD DOCUMENT may BE ATTACHED to an ID note by an
AUTHOR/DICTATOR
```

☞ **NOTE:** The appropriate business rules must be created for each combination of note status and user role.

Unsigned Child Notes

In general, if users are going to attach a pre-existing note, you probably want them to sign it first. However, circumstances may exist in your medical center where you want to permit users to attach pre-existing notes without signature.

If an Interdisciplinary Note entry contains an unsigned child entry, then the Interdisciplinary entry (parent title) displays as an unsigned entry in the tree view, although the individual unsigned note contents are not visible to the user.

Even without an ASU business rule permitting unsigned documents to be attached to an Interdisciplinary note, it is possible to have an unsigned child attached to an Interdisciplinary Note. This happens as follows:

1. In the CPRS GUI Notes tab, select a parent title.
2. Select the menu action Add New Entry to ID Note.
3. Select a title and start writing the note.
4. The process is interrupted and the note is saved without a signature.

A similar scenario is possible in TIU List Manager (LM).

The unsigned child note is visible in the tree structure display, but whether clinicians other than the author can view the contents of this note is dependent on your local business rules.

The software allows an unsigned note to stay attached to its parent entry, thus facilitating retrieval of the note entry. Upon returning to complete the note entry, the author (or as designee) finds the entry within its designated Interdisciplinary Note entry. Furthermore, if a member of the Interdisciplinary Notes Management Team has a need to retrieve unsigned child notes, it is clear what episode of care the note references.

Child Business Rules for Managers

All the business rules for children document titles should be echoed with the CHIEF, MIS as the user class:

```
A COMPLETED (TITLE) INTERDISC CHILD DOCUMENT may BE ATTACHED to an ID note by a
CHIEF, MIS
An AMENDED (TITLE) INTERDISC CHILD DOCUMENT may BE ATTACHED to an ID note by a
CHIEF, MIS
An UNCOSIGNED (TITLE) INTERDISC CHILD DOCUMENT may BE ATTACHED to an ID note by a
CHIEF, MIS
An UNSIGNED (TITLE) INTERDISC CHILD DOCUMENT may BE ATTACHED to an ID note by a
CHIEF, MIS
```

In our example, we have created a user class of highly involved stakeholders to monitor Interdisciplinary Notes. This class is called the IN MANAGEMENT TEAM. We have included the following rules for the team:

```
A COMPLETED (TITLE) INTERDISC CHILD DOCUMENT may BE ATTACHED to an ID note by an IN
MANAGEMENT TEAM
An AMENDED (TITLE) INTERDISC CHILD DOCUMENT may BE ATTACHED to an ID note by an IN
MANAGEMENT TEAM
An UNCOSIGNED (TITLE) INTERDISC CHILD DOCUMENT may BE ATTACHED to an ID note by an
IN MANAGEMENT TEAM
An UNSIGNED (TITLE) INTERDISC CHILD DOCUMENT may BE ATTACHED to an ID note by an IN
MANAGEMENT TEAM
```

TIU Parameters

There are two new document parameters for parent note titles:

      ORDER ID ENTRIES BY TITLE
      SEND ALERTS ON NEW ID ENTRY

The ORDER ID ENTRIES BY TITLE parameter manages the order in which child notes are listed (and printed) within the Interdisciplinary note. If set to YES, instead of listing the child notes in date order (the default), CPRS and TIU will list child notes in alphabetical order by note title. In effect, child notes are then grouped by title.

The SEND ALERTS ON NEW ID ENTRY parameter provides a mechanism to alert the originator of a parent note whenever a child note is attached to the parent note. If set to YES, then an alert is sent every time a new child note is attached to the parent note. This allows the originator to review additions to the interdisciplinary note.

NO is the default setting for both parameters.

If a title is entered as a new parameter to set one of these to YES, *TIU resets all the parameters associated with the note title*. To preserve the previous values, you must look them up, make note of them, and set them accordingly when you set the new parameters. The following worksheet is provided to assist you when doing this: (Entries in parentheses are recommended values.)

Parameters: Access the following menu:
TIU IRM Maintenance Menu [TIU IRM MAINTENANCE MENU]
    TIU Parameters Menu [TIU SET-UP MENU]
        Document Parameter Edit [TIU DOCUMENT PARAMETER EDIT]

Select DOCUMENT DEFINITION: **(title)**
REQUIRE RELEASE:
REQUIRE MAS VERIFICATION:
REQUIRE AUTHOR TO SIGN: **(YES)**
ROUTINE PRINT EVENT(S):
STAT PRINT EVENT(S):
MANUAL PRINT AFTER ENTRY:
ALLOW CHART PRINT OUTSIDE MAS:
ALLOW >1 RECORDS PER VISIT: **(YES)**
ENABLE IRT INTERFACE:
SUPPRESS DX/CPT ON ENTRY: **(NO)**
FORCE RESPONSE TO EXPOSURES:
ASK DX/CPT ON ALL OPT VISITS:
SEND ALERTS ON ADDENDA:
ORDER ID ENTRIES BY TITLE:
SEND ALERTS ON NEW ID ENTRY:
EDITOR SET-UP CODE:
If document is to be uploaded, specify Filing Alert Recipients: Select FILING ERROR ALERT RECIPIENTS:
Now enter the USER CLASSES for which cosignature will be required: Select USERS REQUIRING COSIGNATURE:
Now enter the DIVISIONAL parameters: Select DIVISION:
CHART COPY PRINTER:
STAT CHART COPY PRINTER:

Example Interdisciplinary Note

1. Example of the parent title hierarchy:

```
Create Document Definitions   Apr 12, 2001@10:27:55      Page:    1 of  1
                              BASICS

+      Name                                                        Type
2        PROGRESS NOTES                                            CL
3          REHAB SERVICE                                           DC
4            REHAB PARENT TREATMENT PLAN                           TL




          ?Help   >ScrollRight   PS/PL PrintScrn/List   +/-               >>>
        (Class/DocumentClass)    Next Level            Detailed Display/Edit
        Title                    Restart               Status...
        (Component)              Boilerplate Text      Delete
Select Action: Title//
```

2. The business rules for the parent title of our Interdisciplinary Note:

```
ASU Rule Browser                  Apr 12, 2001@10:46:59      Page:    1 of    2
                  List Business Rules by DOCUMENT DEFINITION         9 Rules
                    for TITLE REHAB PARENT TREATMENT PLAN
                                                                         _
1     A COMPLETED (TITLE) REHAB PARENT TREATMENT PLAN may BE GIVEN AN ID
      ATTACHMENT by a REHAB TEAM MEMBER
2     An UNCOSIGNED (TITLE) REHAB PARENT TREATMENT PLAN may BE GIVEN AN ID
      ATTACHMENT by a REHAB TEAM MEMBER
3     A COMPLETED (TITLE) REHAB PARENT TREATMENT PLAN may BE GIVEN AN ID
      ATTACHMENT by a CHIEF, MIS
4     An AMENDED (TITLE) REHAB PARENT TREATMENT PLAN may BE GIVEN AN ID
      ATTACHMENT by a CHIEF, MIS
5     An UNCOSIGNED (TITLE) REHAB PARENT TREATMENT PLAN may BE GIVEN AN ID
      ATTACHMENT by a CHIEF, MIS
6     A COMPLETED (TITLE) REHAB PARENT TREATMENT PLAN may BE GIVEN AN ID
      ATTACHMENT by an IN MANAGEMENT TEAM
7     An AMENDED (TITLE) REHAB PARENT TREATMENT PLAN may BE GIVEN AN ID
      ATTACHMENT by an IN MANAGEMENT TEAM
8     An UNCOSIGNED (TITLE) REHAB PARENT TREATMENT PLAN may BE GIVEN AN ID
      ATTACHMENT by an IN MANAGEMENT TEAM
+        + Next Screen   - Prev Screen   ?? More Actions
        Find                    Edit Rule            Change View
        Add Rule                Delete Rule          Quit
Select Action: Next Screen//
```

3. Example of the document class Interdisc Child Document (which is in turn under the class Progress Notes):

```
Create Document Definitions   Apr 12, 2001@10:27:55       Page:    1 of  1
                              BASICS

+      Name                                                          Type
2         PROGRESS NOTES                                             CL
3           INTERDISC CHILD DOCUMENT                                 DC
4             REHAB CHILD DISCHARGE PLANNING NOTE                    TL
5             REHAB CHILD INITIAL ASSESSMENT NOTE                    TL
6             REHAB CHILD NURSE NOTE                                 TL
7             REHAB CHILD OCCUPATIONAL THERAPY NOTE                  TL
8             REHAB CHILD PHARMACY NOTE                              TL
9             REHAB CHILD PHYSICAL THERAPY NOTE                      TL
10            REHAB CHILD PSYCHOLOGY NOTE                            TL




          ?Help   >ScrollRight   PS/PL PrintScrn/List   +/-              >>>
      (Class/DocumentClass)      Next Level             Detailed Display/Edit
      Title                      Restart                Status...
      (Component)                Boilerplate Text       Delete
Select Action: Title//
```

4. The list of business rules to support the example child titles within the Document Class of Interdisc Child:

```
ASU Rule Browser              Apr 12, 2001@12:48:02      Page:    1 of    2
                    List Business Rules by DOCUMENT DEFINITION      13 Rules
                    for DOCUMENT CLASS INTERDISC CHILD DOCUMENT
                                                                          _
1    A COMPLETED (DOCUMENT CLASS) INTERDISC CHILD DOCUMENT may BE ATTACHED
     to an ID note by a COMPLETER
2    An UNCOSIGNED (DOCUMENT CLASS) INTERDISC CHILD DOCUMENT may BE ATTACHED
     to an ID note by a AUTHOR/DICTATOR
3    An UNCOSIGNED (DOCUMENT CLASS) INTERDISC CHILD DOCUMENT may BE ATTACHED
     to an ID note by an EXPECTED COSIGNER
4    A COMPLETED (DOCUMENT CLASS) INTERDISC CHILD DOCUMENT may BE ATTACHED
     to an ID note by an AUTHOR/DICTATOR
5    A COMPLETED (DOCUMENT CLASS) INTERDISC CHILD DOCUMENT may BE ATTACHED
     to an ID note by a CHIEF, MIS
6    An AMENDED (DOCUMENT CLASS) INTERDISC CHILD DOCUMENT may BE ATTACHED to
     an ID note by a CHIEF, MIS
7    An UNCOSIGNED (DOCUMENT CLASS) INTERDISC CHILD DOCUMENT may BE ATTACHED
     to an ID note by a CHIEF, MIS
8    An UNSIGNED (DOCUMENT CLASS) INTERDISC CHILD DOCUMENT may BE ATTACHED
     to an ID note by a CHIEF, MIS
9    A COMPLETED (DOCUMENT CLASS) INTERDISC CHILD DOCUMENT may BE ATTACHED
     to an ID note by an IN MANAGEMENT TEAM
10   An AMENDED (DOCUMENT CLASS) INTERDISC CHILD DOCUMENT may BE ATTACHED to
     an ID note by an IN MANAGEMENT TEAM
11   An UNCOSIGNED (DOCUMENT CLASS) INTERDISC CHILD DOCUMENT may BE ATTACHED
     to an ID note by an IN MANAGEMENT TEAM
12   An UNSIGNED (DOCUMENT CLASS) INTERDISC CHILD DOCUMENT may BE ATTACHED
     to an ID note by an IN MANAGEMENT TEAM
+          + Next Screen   - Prev Screen   ?? More Actions
     Find                   Edit Rule              Change View
     Add Rule               Delete Rule            Quit
Select Action: Next Screen//
```

5. Parameter settings:

In our example, we decided to send alerts to the signer (and cosigner) when a user attaches a child note to our parent note. In the display below we enter the parameter settings for our Document Definition:

```
Select TIU Parameters Menu Option: ?

   1      Basic TIU Parameters
   2      Modify Upload Parameters
   3      Document Parameter Edit
   4      Progress Notes Batch Print Locations
   5      Division - Progress Notes Print Params

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select TIU Parameters Menu Option: 3  Document Parameter Edit
First edit Institution-wide parameters:

Select DOCUMENT DEFINITION: REHAB PARENT TREATMENT PLAN        TITLE
  Are you adding 'REHAB PARENT TREATMENT PLAN' as
    a new TIU DOCUMENT PARAMETERS (the 34TH)? No// Y  (Yes)
DOCUMENT DEFINITION: REHAB PARENT TREATMENT PLAN// <Enter>
REQUIRE RELEASE: <Enter>
REQUIRE MAS VERIFICATION: <Enter>
REQUIRE AUTHOR TO SIGN: Y   YES
ROUTINE PRINT EVENT(S): <Enter>
STAT PRINT EVENT(S): <Enter>
MANUAL PRINT AFTER ENTRY: <Enter>
ALLOW CHART PRINT OUTSIDE MAS: <Enter>
ALLOW >1 RECORDS PER VISIT: Y   YES
ENABLE IRT INTERFACE: <Enter>
SUPPRESS DX/CPT ON ENTRY: n   NO
FORCE RESPONSE TO EXPOSURES: <Enter>
ASK DX/CPT ON ALL OPT VISITS: <Enter>
SEND ALERTS ON ADDENDA: <Enter>
ORDER ID ENTRIES BY TITLE: <Enter>
SEND ALERTS ON NEW ID ENTRY: Y   YES
EDITOR SET-UP CODE: <Enter>

If document is to be uploaded, specify Filing Alert Recipients:

Select FILING ERROR ALERT RECIPIENTS: <Enter>

Now enter the USER CLASSES for which cosignature will be required:

Select USERS REQUIRING COSIGNATURE: <Enter>

Now enter the DIVISIONAL parameters:

Select DIVISION: <Enter>

Select TIU Parameters Menu Option:
```

Summary of Examples

For the example Interdisciplinary Note, one (1) parent title and seven (7) child titles were created. A new Document Class was created for the child titles. Two new user classes, one for REHAB team members and one for Interdisciplinary Notes managing stakeholders were defined in the ASU options. Business rules were created to allow all team members the authority to attach appropriate child notes to the appropriate parent note. In addition, business rules were created to give both the Chief of MIS and our managing stakeholders the authority to manage corrections to Interdisciplinary Note entries.

Additional Considerations

Mandatory Business Rule

There is a certain amount of flexibility in business rules, but this one child rule is mandatory:

```
A COMPLETED (DOCUMENT CLASS) INTERDISC CHILD DOCUMENT may BE ATTACHED to an ID note
by a COMPLETER
```

This rule enables TIU to properly list Interdisciplinary Note titles when creating a child note. Any child title with this business rule missing is excluded from lists of available child titles.

Detach Privileges

All the business rules, and the IN action in List Manager, are symmetrical with respect to Attach and Detach. Any user with the ability to attach a child note to a parent note, also has the ability to detach that child note from that parent note. Generally speaking, authors, signers, and cosigners can detach the notes they attached to a parent document.

Why not a single Document Class?

In our example, we pointedly did not include our parent title within the Interdisc Child Document document class. The Parent rule and child rule cannot work at the same hierarchal level. The two rules are contradictory.

In the event, through inheritance or some other mechanism, both the parent rule and child rule apply to the same title, TIU gives the parent rule precedence. Therefore, do not include child titles in a Document Class and then write parent rules for the Document Class. Write parent rules only for parent titles or create a separate parent Document Class.

Why not use USER?

In this guide, Interdisciplinary Notes are restricted to a well-defined group of users. If the user class USER was substituted in the business rules for every instance of the REHAB Team Member user class, there would be less business rules for the Clinical Application Coordinator (or designee) to create for the implementation of Interdisciplinary Notes.

However, it is *not* recommended to create Interdisciplinary Note business rules for the user class USER. This approach would greatly increase the possible occurrences of attaching a child note to the incorrect parent entry. Once a note is attached to a parent, it disappears from the All Notes list and is represented by the parent title.   Retrieval of a misdirected child entry would have to be accomplished via the search options available in TIU. Business rules for a specific user class, such as REHAB Team Member user class, enhance the ability to attach child notes to a specific parent title entry.

Child Rules for Class Progress Notes

Writing the child rules for class Progress Notes is a tempting idea. You would never have to type the child rule again. Plus, you would not have to differentiate child titles with some reserved word, because every title, except the parent titles, would be a child title.

This approach is not recommended, as it would allow any title to be attached as an Interdisciplinary child entry. In addition, it would be difficult to find unattached Interdisciplinary children because there is no way of knowing if a particular note should be attached to an Interdisciplinary Note entry, or designated as an individual progress note.

If you do write child rules for class Progress Notes, consider making a Document Class for each related group of Interdisciplinary children. Then if it turns out that your titles should behave the same as most Progress Notes, you can rewrite rules for that particular Document Class as needed.

This will not prevent other Progress Notes from being attached, but it will make it simpler to search for unattached notes. Simply pull up a list of notes for the specific Document Class.

Use of Existing Titles (Not Recommended)

Prior to the Interdisciplinary Note functionality released with patch TIU*1*100, often existing titles would be coupled with multiple addendum to mimic an Interdisciplinary Note entry. It is recommended these titles not be used as Interdisciplinary Note titles. The use of these titles for Interdisciplinary notes would be accomplished in the following two ways:

- **Changing an existing title.** If an existing title has its name changed to reflect a new Interdisciplinary title, then every previous incident where that the title was used will now reflect the new title name. In this case a note that was written 5 years ago will have its title changed to the current title name.

- **Creating Interdisciplinary Note rules for existing titles.** Use of existing titles in this way is not recommended. You will have titles that did not have Interdisciplinary note capability in the past and now will be able to receive a note entry or be attached to a note entry. A reviewer might ask, "You linked this title this year, why did you not do it last year?" Possibly concluding that the entry from a year ago was incomplete.

We recommend inactivating existing titles for which a similar Interdisciplinary Title is being created. This requires the creation and activation of new Interdisciplinary Note titles.

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